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TENNESSEE VALLEY AGRICULTURAL CORRELATIVE COMMITTEE

Knoxville, Tennessee

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Unnumbered Report

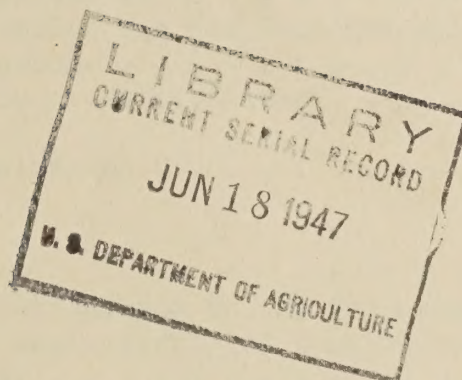
May 1947

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PROCEEDINGS

TWENTY-SEVENTH VALLEY-STATES CONFERENCE

Martha Washington Inn, Abingdon, Virginia  
Wednesday, April 2, 1947



United States Department of Agriculture; Land-Grant Colleges and  
Universities of Alabama, Georgia, Kentucky, Mississippi, North  
Carolina, Tennessee, and Virginia; and Tennessee Valley Authority  
Cooperating





TENNESSEE VALLEY AGRICULTURAL CORRELATING COMMITTEE

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Meeting at  
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## VALLEY-STATES CONFERENCE

## ACTIONS TAKEN BY THE CONFERENCE

SummaryAgency Cooperation in the Tennessee Valley

Mr. Neil Bass outlined the main points in the TVA-College Statement and Counter Proposal and draft of proposed contract between USDA and the land-grant colleges, presented to the Special Advisory Committee at its meeting in Washington, D. C. on February 22, 1947. These documents, together with the Proposal submitted by the USDA representatives at the meeting of the Committee in Chattanooga, Tennessee, on September 23, 1946, are included in the Proceedings of the Conference (text, p. 7 ; appendix, p. 36 ).

In reference to the scope of work of the Special Advisory Committee and to its further activities, Dean Thomas Cooper read to the Conference his letter dated March 25, 1947 to President Donovan, the concluding paragraph of which states:

"These suggestions raised serious questions in the minds of the college representatives. It was our recollection that the function of the Special Advisory Committee was specifically to consider a solution to Soil Conservation Service activities in the Valley. It was not the purpose of the presidents to authorize activities other than the solution of the Soil Conservation question which was raised in their statement to Secretary Anderson. To hold the present situation unchanged is not a solution. Furthermore, it seemed that the solution of other problems would not furnish a usable guide to solution of the SCS problem. I wish to raise the question, therefore, whether in your opinion the time has come for the college presidents to meet again with the TVA Board and determine upon further action in the matter."

The consensus of the Conference was that the problem of SCS work in the Tennessee Valley rests with the principals (text, p. 12 ; appendix, p. 60 ).

Resignation of Mr. James G. Maddox

Dean Thomas Cooper, Chairman of the Correlating Committee, announced the resignation of Mr. James G. Maddox, representative of the USDA, from that Committee (text, p. 12 ; appendix, p. 35 ).

A successor has not been appointed.

Advisory Council to Committee on Cooperatives

-Continued



Advisory Council to Committee on Cooperatives -Continued

Director L. I. Jones, Chairman, Committee on Cooperatives, announced that the Advisory Council to that Committee consists of the following members (appendix, p. 61):

R. H. Bandy, Ringgold, Georgia, representing Georgia Mountain Growers, Inc.  
Charles W. Davis, Brevard, North Carolina, representing Farmers Federation Cooperatives  
E. P. Garrett, Decatur, Alabama, representing Tennessee Valley Fertilizer Cooperatives  
L. E. Skinner, Iuka, Mississippi, representing three county cooperatives in the Valley area of Mississippi  
William G. Smith, Lebanon, Virginia, representing the Southwest Virginia Cooperative  
Howard Hornsby, Peakland, Tennessee, representing Tennessee Farmers Cooperative  
Fred Maddox, Mayfield, Kentucky, representing Valley Counties of Kentucky Cooperative

Survey of Work of Land-Grant Colleges Relating to Cooperatives by American Institute of Cooperation

Director L. I. Jones, Chairman, Committee on Cooperatives, announced that data for the Tennessee Valley have been made available from a national survey, made by the American Institute of Cooperation, of the work of the land-grant colleges relating to farmers' cooperatives. This information will be used to bring up to date the Preliminary Report on this subject prepared by the Committee on Cooperatives and issued by the Correlating Committee in August 1946 (appendix, p. 62).

Publication of Reports

Director L. D. Baver, Chairman, Committee on Research, submitted a recommendation of that Committee "in favor of the setting up of one set of reports emanating from the Valley-States Conference. In line with this recommendation, our Committee suggests that the proposed publication on Sources of Phosphate be published in multilithed form as Valley-States Conference Report No. 1" (appendix, p. 62).

The Committee also recommended that "a report of the results on fused phosphate including certain engineering and animal feeding phases be published as Valley-States Conference Report No. 2" (appendix, p. 63).

These recommendations were referred to the Correlating Committee (text, p. 22).



## VALLEY-STATES CONFERENCE

Analysis of Phosphate Data in the Southeastern Region

Director L. D. Baver reported that the Committee on Research "has asked the Coordinator to summarize and analyze the phosphate data from the various experiment stations in the Southeastern area as a basis for the projecting of further phosphate research" (appendix, p. 63).

Phosphate Fixation

Director L. D. Baver reported for the Committee on Research that "the special phosphate fixation committee, which was set up for the purpose of organizing research on phosphate fixation in the Southeastern area, met at the Omaha meeting of the American Society of Agronomy and at the Biloxi meetings of the Southern Agricultural Workers...This Committee suggests that the phosphate fixation committee meet at the Shoals at some date in the future with the members of the Engineering Laboratory and others so that they could become better acquainted and so that the State folks would know of the facilities at the Engineering Laboratory" (appendix, p. 63).

Radio Isotopes

Director L. D. Baver reported for the Committee on Research developing interest in the use of radio isotopes in research work by agricultural experiment stations and stated: "Our Committee recommends that we attempt to establish working relations with the Oak Ridge Institute and acquaint them with the research organization in the experiment stations of the area" (appendix, p. 63).

Engineering Projects on Pasture Fertilization

Director L. D. Baver reported for the Committee on Research that "the projects proposed by the engineers for equipment for applying fertilizer to pastures has been approved", and listed the suggestions made by the Committee in the carrying out of these projects (appendix, p. 64).

Functions of Standing Committees

Director L. D. Baver reported the view of the Committee on Research that "members...do not feel that the logic in setting up the various committees has helped the Directors much in a coordinated research program." The Committee submitted two alternative recommendations for improving the set up of the committees (text, p. 14; appendix, p. 65).

These recommendations were referred to the Correlating Committee (text, p. 22).



## SUMMARY

Joint Regional Research Group on Farm Housing

Mr. Frank S. Chance, Chairman of the Committee on Resource Utilization submitted a report for that Committee recommending a program of research on farm housing and farm structures in the Tennessee Valley and proposing "that the USDA, NHA, and the TVA consider establishing a small joint staff to locate in the Tennessee Valley and to carry on research in farm housing" (appendix, p. 70).

The report and recommendations of the Committee were adopted by the Conference "subject to the reservation that projects developed pursuant to the recommendations contained in the Committee's report shall integrate with or be supplementary to projects under the Hope-Flannagan Act" (text, p. 25).

TVA-State Relations

At the luncheon session of the Conference, Director H. N. Young, Agricultural Experiment Station, Virginia Polytechnic Institute, spoke on TVA-State Relations. Director Young said (text, p. 25; appendix, p. 74):

"I trust that the TVA program will continue to be channeled through the States, as it is now, and that the central organization will continue to delegate to the States the responsibility of developing programs in each simultaneously--programs which will recognize local differences.

...

"State institutions which accept funds from the TVA are under obligations to set up their research and educational programs in such a way that they will yield valid results. Funds which can not be used effectively should not be requested."

Federal-State Relationships in the Tennessee Valley

Director I. O. Schaub, Agricultural Extension Service, North Carolina State College, presented a statement to the Conference on this subject. On the general subject of Federal-State relationships, Director Schaub said (text, p. 25; appendix, p. 79):

"However unfortunate it may be that we have jealousy, competition, confusion, charges, and countercharges between agencies, these matters are of minor importance compared with the fundamental principle. Fundamentally, the question is: Shall our agricultural policy, in a broad way and in detail, be determined by the Federal Government or shall it be handled in cooperation with State and county governments, and ultimately, the individual farms?"



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Supply of Phosphatic Fertilizer in the Tennessee Valley

Mr. Neil Bass, Chief Conservation Engineer, Tennessee Valley Authority, made a statement to the Conference on this subject. Mr. Bass summarized the relationship of TVA to the general problem by saying (text, p. 26; appendix, p. 84):

"...Our job is to develop these new fertilizer processes and prove their economic feasibility in actual plant operation and then to produce enough material for the testing of new products and for educational phases of the program--that is, so the farmers might get experience from these materials in the kind of farming practices that your institutions recommend. There is pending legislation, the National Soils Fertility Bill, to extend the test-demonstration farm device on a national basis, and if that bill passes an additional block of this tonnage will be absorbed in the extended test-demonstration work. In any event, it is clear that all our plant can produce will be severely needed, either for test-demonstrations, or to help out during the period of needed phosphate supply."

Death of Director Clarence Dorman

On motion made by Director L. D. Bayer, members of the Conference rose and stood in silence in memory of the late Director Clarence Dorman of the Mississippi Agricultural Experiment Station (text, p. 29).

Next Meeting of the Conference

On recommendation of the Correlating Committee, the Conference voted to hold its next meeting in Knoxville, Tennessee, on Wednesday, April 7, 1948 (text, p. 12; appendix, p. 35).

## OPENING OF THE CONFERENCE

Dean Thomas Cooper, Chairman of the Conference, called the meeting to order at 9:10 a.m.

(For the roll of the Conference, see appendix, p. 32; and for the program of the Conference, see appendix, p. 33.)

## REPORT OF CORRELATING COMMITTEE

Dean Thomas Cooper, Chairman of the Correlating Committee, presented the report of that Committee (appendix, p. 34). Proceedings relating to this report follow.



## CORRELATING COMMITTEE

Progress ReportAgency Cooperation in the Tennessee Valley (appendix, p. 34)

## DISCUSSION

- Cooper. Mr. Bass, will you summarize the College-TVA proposal that was made at the February 22 meeting of the Special Committee?
- Bass. In view of the fact that the members of the Special Committee representing the Department of Agriculture have indicated that USDA could not agree to making grants-in-aid to the colleges to carry out the SCS responsibilities in the regional program, we submitted on behalf of the colleges and TVA representatives a counter proposal. This counter proposal suggested that the USDA contract with the several land-grant colleges for the performance in the Tennessee Valley region of those responsibilities of the Department for soil conservation activities, provided for in the SCS Act and that upon the satisfactory completion of those functions USDA would pay the colleges a sum of money as previously agreed upon in the contract. The contract also provided for joint collaboration between the USDA and the colleges in research work and also in planning the scope and character of a mutually agreeable program which would carry out these responsibilities. I am sure you recognize that this contract device, as advanced, very closely parallels the arrangement now in existence between TVA and the colleges.
- Cooper. It seems to me that that presentation is important in bringing out the theory of the relationship involved as a basis for further discussion of the proposal by this group.
- Bass. I think it would be mutually helpful if we on the Committee could have the benefit of any review and comments on the document or the policy that it represents.
- Clayton. I believe there have been three documents laid before the Special Committee. The SCS's proposal presented at Chattanooga; the TVA-College counter proposal presented at Knoxville; and a revision of this counter proposal and a form of contract presented at Washington.
- Bass. I suggest that we as a Committee would very much welcome comments and criticisms of the documents as submitted, and I'd like to suggest that they be added to the proceedings of this Conference.
- Davis. That would be fine.
- Cooper. If there is no objection there will be attached to the proceedings then, the documents referred to. I would like for Mr. Bass to describe the contract document in some detail, if he will.



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The documents referred to will be found in the appendix, p.36 .

Bass. The contract document to which the Chairman refers, implements the policy which was heretofore adopted by the Valley-States Conference, to endeavor to carry out the SCS responsibilities as a part of the joint cooperative regional program. The contract document begins by a recitation of the mutual objectives of USDA, the colleges, and the TVA. The document itself is a contract between the USDA and the colleges--TVA not being a party. Then, next, the contract states the purpose and policy of the two agencies in carrying out this joint program and provides for carrying out the responsibilities assigned USDA through the SCS allotment act of 1935 in a manner which would make effective the purpose of the Memorandum of Understanding. These functions under the proposed contract would be made a part of the joint regional program. The contract sets out an agreed mode of operation first in the field of research or investigations, and gives a definition of the proposed scope of investigations and sets out the procedure to be followed between the experiment stations and the USDA. The contract spells out the method of providing technical assistance to farmers (which is a field phase of the program,) and specifies that all the field contacts with farmers would be by employees of the State extension service.

On the district or State level, however, there might be by mutual agreement SCS employees working jointly with the State extension service. The staff on the State and district level would be engaged in general planning and appraisal functions and would not be a part of the field force working directly with the farmers. Another section of the contract provides for the administration of projects by providing who would represent the SCS and setting out that the Director of the Experiment Station represent the college for experiments and investigations, and the Director of Extension Service for field work. The types of projects were enumerated. These set the pattern for the scope of the work--how it would be carried out and anticipated results and methods of procedure. It provides that upon the appraisal of the work which had been carried out that the SCS would pay the colleges the amount agreed upon for the carrying out of the particular work anticipated in the contract. The contract was set up to run from year to year or until either party terminated it with thirty days notice. As you see, it follows closely the form of contract between TVA and the colleges.

Cooper: Thank you, Mr. Bass. Are there any questions? All of these institutions, including the USDA, here represented should get the general picture of what has occurred. Two viewpoints were presented at the previous meetings. The SCS proposal was presented at the Chattanooga meeting. At the Knoxville meeting the colleges and the TVA presented their viewpoints; the same counter proposal was reworked and presented again at the Washington meeting along with the contract document. The counter proposal represents a method of administration which is common in all of the States in carrying out the relationships that



## CORRELATING COMMITTEE

Cooper. have been more or less customary as far as extension activities are concerned. So, there was before the group two distinctly different ideas of procedure and relationships.

The viewpoints developed seem to me to be so important that I shall, with your permission and for your further information, read to you portions of the minutes of the meeting in Washington on February 22.

Dean Cooper then read from the minutes (appendix, p. 55 ).

Cooper. It was then proposed that the Special Committee take up one of the other problems that had been previously presented to the Correlating Committee in the Secretary's letter of March 28, 1946 (Minutes, April 3, 1946, p. 40). I suggested that in accordance with my memory the Special Committee had been appointed for the special purpose of dealing with the SCS problem and that in so far as I could remember the correspondence would substantiate that. After getting back to the office, I looked up the correspondence and found that I was right. It was clear from the standpoint of the presidents that they felt that the Special Committee was set up to deal with the SCS problem. Following that I wrote President Donovan who was the Chairman of the committee of the presidents of the Tennessee Valley States. In order that you may be brought up to date, I'll read that letter.

The letter of March 25, 1947, from Dean Cooper to President Donovan, referred to and read by Dean Cooper at this point, will be found in the appendix, p. 60 .

Cooper. I have not had a reply to this. I do hope, however, that the Chairman will see fit to call a conference of the Presidents in this Valley region to meet with the Directors of TVA and to further discuss the points that are involved; and, frankly, I hope that they may have a further conference with the Secretary. I believe that the matter is of such importance and is so fundamental, not only to the USDA and the land-grant institutions, but to the people in the Valley and in the United States that we ought to continue, through our principals, at least, to try to find a method of coordination that will be reasonably satisfactory to all of us. I intend to keep you advised as to what may occur from time to time so far as these conferences are concerned.

Davis. Are you suggesting action by this Conference that the Presidents should meet with the TVA? I think that is fine. I wonder if we should suggest that to them? Would that be in order?

Cooper. Personally, I think it is very important that we get together on a solution.

Bavor. I want this in the record. I have some knowledge of a confidential nature which leads me to believe that the Department is not interested in working this out. I do not subscribe to holding out for some of the things that the TVA group holds out for in

## PROCEEDINGS

Baver. the so-called contract. I do know that a solution has been given to the Secretary's office for a proposed basis of discussion which would mean a considerable amount of concessions on the part of the college and TVA groups and which I think is one that the group would accept, but that they pigeon-holed it and have not permitted it to come out. I know that to be a fact.

McAmis. I would like to ask that Mr. Baver supplement his statement as to his reservations regarding the TVA proposal.

Baver. I am talking about something that has not emanated from the TVA or the colleges.

McAmis. But that isn't what the record states. It states that you don't go along with some of the points of the TVA.

Baver. I don't.

McAmis. Do you mean the TVA and the colleges?

Baver. Yes, the TVA and the colleges.

McAmis. I want to inject one idea. I gathered, decidedly, from the discussions of the Special Committee, the idea that there was not only some question of the philosophy here in the Valley, meaning method pretty much, but, also, that there is a question as to whether the program as it is now going on was adequate to accomplish the required results in soil conservation that the Department has in mind. I think, if that is the case, that this group ought to look that question in the face and appraise what is going on quantitatively, not just qualitatively, and see whether the Valley program does reach a reasonable standard of performance.

Cooper. I think the matter you called attention to, Mac, is the one that was brought up by Dykes as to the necessity of immediate action and increased action in order to maintain and conserve our soil resources. If you remember, Dean Schaub at least attempted or did discuss the various angles of that question. Now, from the standpoint of your comments, do you want this group to consider this now or at a future date?

McAmis. I am not sure there would be time now, but it is important that this group look at the work which is going on and see whether, in their judgment, the program does measure up to the needs in the Valley, as viewed from the standpoint of the SCS. But I think Dykes insisted on some concrete evidence that we are really going to get the job done. It is important that this question be faced.

Cooper. I wonder if it wouldn't be well to take a few minutes to present the point of view that led to the question of Dykes as to how soon the job would be accomplished. Would you care to



## CORRELATING COMMITTEE

Cooper. present that, Mac?

McAmis. I'd be afraid I couldn't present the SCS point of view. This would indicate, I believe, what was in mind, however: The question was very pointedly put: Do the members of the Committee believe that this matter of soil conservation in the country is so important that it ought to be under the watchful care of an agency set up to deal specifically with soil conservation? Following that there was a good deal of discussion, and a very definite statement that this country had to make certain measures of progress by the end of a certain period--about seven years. That that was essential for the security of the country. A certain rate of progress must be attained within that length of time and that we would be playing with fire not to lay our plans to accomplish those results. If that is the case, the question is what is the program in the Tennessee Valley region to match the national program; and there were figures given on a national basis as to acreage involved, number of farms, farm plans, et cetera.

How is it in the Tennessee Valley region? Where do you expect to be in the Tennessee Valley within a given length of time? Schaub undertook to answer that. Of course I made some statements on it. We were a little indefinite as to whether it would ever be completed from the Valley viewpoint. Schaub's statement indicated that the program in the Valley was at least as rapid and probably more rapid than that outside of the Valley in North Carolina. He stated that, according to the present rate, in the next five or six years all the farmers in the Valley counties of North Carolina would be on the unit or area test-demonstration program. He didn't mean to indicate that the soil conservation job would be complete. I think the discussion points up the necessity of getting some quantitative measures of the work which we are doing so that if this question comes up elsewhere, and it probably will, the answer can be stated with more definiteness than probably it can at the present time: What the quantitative measures are and what we hope to achieve under the present program, in a given time, if another program isn't adopted.

Baver. I'd like to make two comments to supplement the proceedings.  
(1) In relation to the statement by Mr. Brannan about the lack of coordination of the TVA program with other departmental agencies. That is not peculiar to the Tennessee Valley region.  
(2) This is a personal opinion which, on the basis of observation, I believe could be backed up by research. I believe there is a higher percentage of efficiency in North Carolina in the fifteen counties in the Valley area, where we have worked with the farmers, as far as soil conservation is concerned, than any place else in the State.

The question raised by Mr. Brannan was whether the TVA-College proposal provided for coordination of all Department programs, not the TVA program necessarily. In other words, the proposal

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Baver. of the Department of Agriculture did provide a method of cooperation in the counties of the Tennessee Valley. Schaub said: "We don't agree that coordination of Federal Programs and State programs and regional programs can be done by groups of farmers, but it must have some public agent there." He thought it could be better done through the county agents' offices. I think that is the question that Brannan raised. It was not a question of divergence of Department programs from the program of the region, but the general question of effective coordination of all agricultural programs at all times.

Davis. I want to add this about the question on soil conservation requiring a separate agency. Our experience is that soil conservation is not an isolated problem. A farmer farms to make a living, not just to conserve. Conservation is just part of the process and ought to be dealt with as a part of the whole program. I don't see the necessity for trying to isolate it.

Cooper. I wish Brannan was down here. But he was tied up in Washington.

Davis. Do we need any action here? This is an unfinished problem. Is there anything else the group can do?

Cooper. I think the question rests with our principals. Would that be correct?

The suggestion of the Chairman was agreed to without a formal vote.

McReynolds. I didn't get clear the statement about the status quo within the Valley. Did you have a statement of the Department as to that?

Cooper. The statement from Brannan says that a status quo will be maintained. The Presidents asked that there should not be further counties brought into soil conservation districts until this matter was taken care of. Mr. Brannan stated that it was not the intention of the Department to bring in further counties while this matter was in the process of discussion.

Resignation of Mr. James G. Maddox (appendix, p. 35)

Other Pending Business (appendix, p. 35)

Additional Proposals and Recommendations

Next Meeting of Conference (appendix, p. 35)



## COMMITTEE ON COOPERATIVES

Cooper. I move that the report of the Committee be accepted.

Davis. I second the motion.

The motion was agreed to.

Schaub. According to the general plans as adopted, the Standing Committees, except the Committee on Organization, will meet well in advance of the Conference; the Committee on Organization will meet on the day preceding the Conference.

## REPORTS OF STANDING COMMITTEES

Committee on Organization

## DISCUSSION

Schaub. Mr. Chairman, since there were no matters to come before it, the Committee has not met. The Committee has nothing to report.

Committee on Cooperatives

Director L. I. Jones, Chairman of the Committee on Cooperatives, presented the report of that Committee (appendix, p. 61). Proceedings relating to this report follow.

## DISCUSSION

Jones. I move the adoption of the report.

Davis. I second the motion.

The motion was agreed to.

Cooper. Is there any discussion? Do you think the cooperative movement is progressing with reasonable rapidity in the Valley States?

Jones. Yes. A report which is now in the hands of the Correlator will show a need for assistance on the part of the educational agencies for educational work, particularly education among the members. As you recall, the two employees of Georgia and Kentucky that were present at the Biloxi meeting made very interesting reports of the activities going on in the two States. At a previous meeting this Committee recommended to the Conference, and it was approved, that all States look toward employing a cooperative man such as Georgia and Kentucky have to work with the cooperatives.

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Cooper. Do you think the people are welcoming the idea of this work?

Jones. Yes. They are.

Directors Young and Brown, members of the Committee, concurred.

Committee on Extension and Resident Teaching

## DISCUSSION

Davis. Mr. Chairman, our Committee has been unable to meet, and, therefore, has no report to submit.

Committee on Research

Director L. D. Baver, Chairman of the Committee on Research, presented the report of that Committee (appendix, p. 62). Proceedings relating to this report follow.

## DISCUSSION

Baver. For the benefit of the group here, this is my swan song as Chairman of the Research Committee. I have too many other responsibilities and there is plenty of other talent in the Valley. So, after today, I am no longer a member of the Research Committee. In regard to Experiment Directors on this Committee, Funchess, Stuckey, and myself have been in somewhat of a fog as to exactly what our functions have been. At the time this Committee was set up, there were a few things of research activities in the TVA-State programs that we felt needed action, as it tied into our research program. That is the overall research program of the Experiment Stations. Consequently, since at that time the only research projects that were active were in the fields of forestry and fertilizers, the Committee on Research was set up and those things were allocated to it. But other things developed. I found in North Carolina, for example, that certain engineering aspects coming in there looked like they needed correlation. And several other things came up, so we tried to get those correlated so as to make the maximum amount of effectiveness. We were the medium through which we would get the Experiment Station research program in one unit. Since that Committee was set up and as a result of considerable amount of discussion, as you know, I believe that we were the one Committee that had the Correlator. But now we have the question of several Committees doing certain segments of research similar to the Experiment Station, and not having correlation between those respective Committees. I feel that there are some things which ought to be taken into consideration in organizing and setting it up differently. It looks to me, in the light of the present organization, that



## COMMITTEE ON RESEARCH

Baver. this recommendation which we are making here is not ready for you on the Correlating Committee to receive and should be turned over to the Committee on Organization and Policy.

Clayton. We have no such committee. The Committee on Organization was set up as a Standing Committee of the Conference "to consider and make recommendations . . . regarding procedural and organizational arrangements, consistent with established policies . . ." The "policy" committee is, of course, the Correlating Committee, although its actions are wholly recommendatory to the principals to the Memorandum of Understanding.

Baver. It is my interpretation that the Correlating Committee discusses the policy as recommended to them by the Conference.

Clayton. I think not. The Valley-States Conference isn't even mentioned in the Memorandum of Understanding.

Baver. That's funny. In these things involving policy or recommendation for action, at least the Correlating Committee should want to know what the members of the Conference think on that.

Clayton. That is true. However, under the Memorandum of Understanding, the Correlating Committee is directed to consider proposals and to make suggestions and recommendations to all parties to the Memorandum.

In developing its suggestions and recommendations, the Correlating Committee refers proposals to appropriate Standing Committee of the Conference. It is for this purpose that the Correlating Committee recommended that Standing Committee be set up.

The Correlating Committee, of course, does wish to know the views of the Conference on such suggestions and recommendations. It is in the Conference that such matters are discussed by high administrative officials representing the principals to the Memorandum to Understanding; thus, the Correlating Committee directly, or through the Standing Committees, brings before the Conference all matters of general interest to the principals for discussion and action. Actions taken by the Conference are, of course, advisory to the Correlating Committee as to what recommendation, if any, it may make to the principals on the matter in hand. As a practical matter, action by the Conference is normally the equivalent of action by the principals; except, of course, in those special cases involving basic differences among the principals themselves.

Baver. I for one object if that is the situation, and so do the other members of the Committee; to the fact that the Correlating Committee would say that this is the way we are going to function without our recommendations.

Clayton. I do not mean to argue the merits of the set-up. I'm merely

## PROCEEDINGS

Clayton. trying to state what the set-up is, as provided by the Memorandum of Understanding, and by actions taken by this Conference pursuant to recommendations of the Correlating Committee. The organization and procedure have been submitted to and adopted by the Conference.<sup>1/</sup>

Baver. You have a Correlating Committee involving the Department of Agriculture. It's set up to handle things between the three agencies. Wouldn't be any reason for having USDA represented if that was not so. These Standing Committees involve policy just between TVA and the colleges.

Clayton. I do not undertake to speak for the Correlating Committee as to matters on which the Committee has not acted. But as to this point, the position of the Committee is, I think, quite clear, and, if I misstate that position, two members of the Committee, including the Chairman, are present and can correct me. The position of the Correlating Committee, and also of this Conference, is that these Standing Committees are concerned, in their respective fields, only "with the joint agricultural program in the Tennessee Valley", i.e., with proposals and projects arising under the Memorandum of Understanding (footnote 1). It follows from that conception that all parties to the Memorandum of Understanding should be appropriately represented on these Committees, including, of course, the Correlating Committee, through its Executive Secretary (footnote 1).

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1/ The actions referred to are as follows:

#### Establishment of Standing Committees

Recommended by the Correlating Committee to, and adopted by, the Twenty-First Valley-States Conference, April 3, 1944 (Minutes, p. 14).

#### Functions of Standing Committees

The functions and work of all present Committees was to be appropriately allocated among the Standing Committees (Minutes, April 3, 1944, p. 15).

Committee on Research. The work of this Committee relates "to current and needed research in connection with the joint agricultural program in the Tennessee Valley" (Minutes, April 3, 1944, p. 14); such work to be carried on, through a Correlator, "in effective relationship to the Executive Secretary of the Correlating Committee and to be concerned primarily with . . . the technical research program," the aim being for the Correlator to service "the Committee on Research and through that

-Continued



## COMMITTEE ON RESEARCH

Baver. If that is the way the Correlating Committee functions on the thing . . .

Clayton. On the matter of correlation of research, it happens, Dean Baver, that on your Committee there is no representative of the USDA at all, although the research program is a program involving the three agencies. If we are going to set up a device for correlating the Valley agricultural program, under the Memorandum of Understanding--and that is what the Correlating Committee with the approval of this Conference, has undertaken to do--then no party to the Memorandum should be excluded from membership on these Committees. The Committee on Research took action that no such representative was to be appointed to that Committee from the USDA. In addition, it should be noted that the general responsibility for correlation rests on the Correlating Committee under the Memorandum of Understanding. In my opinion, the Correlating Committee could not divest itself of that responsibility, even if it so desired.

Coleman. We are admitting, from an overall standpoint, that we can't correlate with the USDA, by the discussion that has gone previously. So far as we are concerned this correlation is, actually, only between the TVA and the colleges.

Baver. It's my understanding from all the meetings we have had that this Conference is responsible to be run from the standpoint

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Footnote 1 -Continued

Committee the Correlating Committee" (Minutes, October 3, 1944, appendix, p. 17).

Other Standing Committees. Other Standing Committees have relationships to the Correlating Committee identical with those cited for the Committee on Research (see references given above). The question raised by Dean Baver is whether these other Standing Committees were authorized by the Conference to deal with research problems in their respective fields. The pertinent actions of the Conference, taken on recommendations of the Committee on Organization, follow:

The Committee on Cooperatives is authorized, "in relation to the agricultural program of the Valley . . . to propose specific programs and activities" including "(a) surveys and analyses essential to undertaking or expanding cooperative enterprises . . ." (Minutes, October 3, 1944, appendix, p. 16) and, pursuant to this authorization, the Correlator of the Committee is authorized to assemble information and prepare reports "to show the progress, current status, and specific needs of farmers cooperatives, and the cooperative program" (Minutes, October 3, 1944, appendix, p. 17).

-Continued

## PROCEEDINGS

- Baver. of what the State folks want to have. If that is not the case, it ought to be changed. The way the Research Committee is set up at this time. . .
- Clayton. I think these recommendations are entirely in order, but that they should be referred to the Correlating Committee.
- Davis. What is the deficiency of the present set-up ?
- Baver. The Correlating Committee says that all we can do is research on physical sciences. If that is true, change the name of our Committee.
- Davis. As I recall, at the time these committees were created, the suggestion was made that we consider adding to the Extension Committee a representative of the USDA. We decided then that we should not do that. I believe that the Committee on Research had the same decision.
- Baver. I recall that there was divided opinion in our Committee as to what should be the recommendation on it.
- Davis. Either Committee could ask for a representative of USDA. We have that authorization, if we choose.
- Clayton. The authority to appoint additional members to a committee from

Footnote 1 -Continued

The Committee on Resource Utilization has the broad field of economic and social problems of the Valley (excluding cooperatives, which were subsequently assigned to the Committee on Cooperatives), including recommendations "relating to actual and needed shifts in the use of land for agriculture (including forestry) and other purposes; supplies of fertilizer, quantities used, and quantities needed in the agriculture of the Valley; agricultural and industrial relationships; farm, family and community organization and problems; local industries, etc." (Minutes, April 3, 1944, p. 15); and, pursuant to this authorization, the Correlator for the Committee, in "servicing" the Committee, is "to be concerned primarily with the development of adequate methods and procedures and the initiation of proposals and projects relating to 'resource utilization' and with the organization, analysis, and presentation of the results of field surveys with a view to their utilization in the Valley program" (Minutes, October 3, 1944, appendix, p. 17).

The Committee on Extension and Resident Teaching is concerned, broadly, "with recommendations relating (1) to the extension activities in the Tennessee Valley conducted as a joint coordinated activity under the Memorandum of Understanding". . . "and (2) to the curricula of public

-Continued



## COMMITTEE ON RESEARCH

Clayton. the personnel of the agencies cooperating here was vested in the Chairman of each committee.

The question of publications, on which the Committee on Research makes recommendations, is one that is up before the Correlating Committee, on which the Committee has not acted. I think that that question, being before the Correlating Committee, will be discussed in the light of the recommendations made by the Committee on Research and other considerations, and that the Correlating Committee will bring in recommendations on that. The same thing is true on the question of committee organization and functions.

Baver. I disagree with you on the mechanics of that. What are the functions of the Organization Committee?

Clayton. The first recommendation your Committee makes here is that all research projects on this regional program be cleared through our Research Committee; and no such projects be initiated unless they are cleared through that Committee. It so happens that the Memorandum of Understanding vests that function specifically in the Correlating Committee. In discharging this function, it would seem to be perfectly consistent and proper for the Correlating Committee to rely on special committees representing the participating agencies, for advice in reaching decisions as to the recommendations of the Correlating

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Footnote 1 -Continued

schools and colleges . . ." (Minutes, April 3, 1945, appendix, p. 14), and, further recognizing the distinction between technical research (with which the Committee on Research deals) and field surveys (the concern of other Standing Committees), the Conference instructed the Correlator for the Committee on Extension and Resident Teaching, in "servicing" that Committee "to be concerned primarily with (1) assisting the Committee in the formulation of regional recommendations for extension work that will effectively utilize the results of technical research and field surveys in the 'follow through' or 'action' aspect of the Valley program; . . ." (Minutes, April 3, 1945, appendix, p. 14).

Correlation of Work of Standing Committees

Under the Memorandum of Understanding, the general function of correlation is vested in the Correlating Committee. The Correlating Committee, recognizing the need for correlation of the work of the Standing Committees, made the following recommendations, which were adopted by the Conference:

-Continued

## PROCEEDINGS

Clayton. Committee to this Conference or the principals. That is what the Committee has tried to do.

Baver. The chairmen of each of the Standing Committees constitute the Organization Committee.

Clayton. The Organization Committee was set up with this thought: Various questions of organizational relations will arise within the framework of this Conference. With the view of getting agency advice on such matters, a Committee on Organization was recommended to consider questions of organization within the framework of the Conference, but not questions of policy, program relationships, etc., since these functions are vested in the Correlating Committee itself.

Baver. That's what I am suggesting to do. We have a situation here now. What should be the organization of this? The policy has been established by the Correlating Committee that we should have Committees. Why shouldn't the Organization Committee handle this, on the basis of reorganizing the Committee?

Clayton. There is no question in my mind that when the Memorandum of Understanding was drawn up that the vehicle for facilitating agency cooperation for the ends we are seeking was the Correlating Committee. It is difficult, if not impossible, for a committee of three to do that. Certainly, such a committee requires an organizational structure through which it can

Footnote 1 -Continued

"That the Executive Secretary shall serve as Secretary of each Standing Committee of the Conference; that it is recommended that he be requested to serve, also, as Secretary of such special committees as may from time to time be established by any of the participating agencies in conjunction with the carrying out of any joint coordinated activity under the Memorandum of Understanding" (Minutes, April 3, 1944, p. 15).

That the Correlator of each Standing Committee is "to work in effective relationship to the Executive Secretary of the Correlating Committee" and be "especially concerned" with "servicing" the Correlating Committee through the particular Committee to which he is assigned (Minutes, October 3, 1944, appendix, p. 17).

"That these correlators constitute a regional staff to service all parties to the Memorandum of Understanding in reviewing and preparing recommendations regarding the technical merit of each 'proposal' or 'project' involving a joint coordinated activity. (It is suggested that such recommendations should route through the Executive Secretary of the Correlating Committee to the appropriate Standing Committee of the Valley-States Conference, and from that Committee through the Executive

-Continued



## COMMITTEE ON RESEARCH

- Clayton. operate and from which it can obtain joint discussion, advice, and action. Such an organizational structure is happily provided by this Conference and by Standing Committees of this Conference, representing all parties to the Memorandum. When these committees were set up, this was the thought: Create a Committee on Research and thus the Correlating Committee would be able to get specialized advice in that field. At the same time there are other fields, such as cooperatives, and the same thing is true of extension. That was the whole theme. Give the Correlating Committee authorities from which to get advice in these special fields.
- Baver. One weakness: The Correlating Committee is off first base when they try to tell us that this is the way it's going to be set up when maybe we don't want it set up that way.
- Clayton. That was not done. To facilitate its work, the Correlating Committee felt that these Committees should be set up. Accordingly, these recommendations were brought up (in the first instance by the Correlating Committee directly and later--after it was set up by the Conference on recommendation of the Correlating Committee--through the Committee on Organization) to the Conference. (See footnote 1, p.16.)
- Baver. If the record shows that this Valley-States Conference adopted these delimitations of the work of the Research Committee, you send me those, and I'll write you a letter of apology. They were either set up when I wasn't present at the Conference or I was asleep. (See footnote 1, p.16.)
- I move the adoption of the Research Committee's report.
- Davis. I second it.
- Cooper. Does the group want to hear again briefly the points that have been raised before they vote?
- Chance. Mr. Chairman, with the consent of Director Baver and his second,

Footnote 1 -Continued

"Secretary to the Correlating Committee, for consideration and recommendation to the Valley-States Conference.)" (Minutes, October 3, 1944, appendix, p. 18.)

In the same connection, the Correlating Committee, at its meeting on July 1, 1946, took the following action:

"In order to facilitate correlation of the work of the Standing Committees of the Valley-States Conference, the Correlating Committee voted to designate its Executive Secretary as a member ex officio of these Committees" (Minutes, p. 3).

## PROCEEDINGS

Chance. I wish to offer a substitute motion: I move that the report of the Research Committee be received by the Conference and referred to the Correlating Committee for consideration of the various recommendations and alternatives proposed and for appropriate action.

Davis. I second that motion.

The vote was on the substitute motion which was agreed to.

Baver. You need to appoint a new chairman. That's in the record too.

Jones. I think that's outside . . .

Cooper. The Correlating Committee is very much in need of the help your committees give us.

Accordingly, the report of the Committee on Research was received and referred to the Correlating Committee.

Committee on Resource Utilization

Director Frank S. Chance, Chairman of the Committee on Resource Utilization, presented the report of that Committee (appendix, p. 66 ). Proceedings relating to this report follow.

## DISCUSSION

Chance. I move the adoption of the report.

Davis. I second the motion.

Cooper. Any discussion? I vote yes, subject to a reservation which I'll make later.

Clayton. I'd like to take a minute to give the setting of this report.

This enterprise originated in conversations between TVA and National Housing Agency, and as a result of these exchanges, it was thought to be desirable for a larger group to discuss the question. This group came together under the auspices of the Correlating Committee. Chance pointed out that that meeting was held in Knoxville and that representatives included people from NHA, USDA, TVA, and the colleges.

The net output of the meeting was to propose that the Correlating Committee develop and present to the principals to the Memorandum of Understanding and to the NHA a project proposal for the investigation of the housing problem in the Tennessee Valley. That put the Correlating Committee in the spot that the Committee is faced with right along. It seems to me that the request was in line with the functions vested in the



## COMMITTEE ON RESOURCE UTILIZATION

Clayton. Correlating Committee. But the Committee is made up of three people and can't do everything; so, following the procedure approved by this Conference, the Committee sought the help of people who have some specific qualifications in this particular field.

Among the Standing Committees, it seemed that the one which tied in best was the Committee on Resource Utilization to consider this problem. The Correlator for that Committee naturally wished to get the advice of people conversant with this field of housing. Therefore, a special committee was set up by Mr. Chance for this purpose, drawn from the people in the colleges, TVA, USDA, and NHA, who were working in that field; and the deliberations of that committee were submitted to the Committee on Resource Utilization and it in turn has presented a report to this Conference.

Thus, instead of the Correlating Committee taking this proposal and looking at it and making recommendations to the institutions and agencies, the matter has been handled through our committee system, as a part of the regular process. Finally, the recommendations thus developed are brought before this Conference for discussion and action advisory to the Correlating Committee in formulating its report and recommendations to the principals.

That is where the report sets now.

Baver. I'd like to suggest that we delay a vote on this, until we know more about the rural housing situation in the South.

Coleman. I second that suggestion. Something might conflict.

Cooper. I assume that there is no objection to deferring the vote?

Schaub. The report suggests that there be a prolonged discussion of the report.

Baver. I think one phase of it needs evaluation.

A vote on the report of the Committee on Resource Utilization was deferred.  
(See p. 24.)

## THE HOPE-FLANNAGAN BILL

## DISCUSSION

Cooper. Dr. Baver, will you give us some comments on the Hope-Flannagan Bill in relationship to research as it affects the region, and what the status of the program is?

Baver. As you know, in Hope-Flannagan there are two major divisions--- Title I and Title II. The Act itself was called the Research

## PROCEEDINGS

Baver. and Marketing Act. In our discussions here we will be concerned with Title I primarily. Marketing future in Title II is also of some concern.

Title I is nothing more than an amendment to the present Bankhead Jones law for research. In that particular amendment there are several major features. One is the broadening of the authorization of the original Act. In this broadening of authorization there have been several bills combined to make up this amended law. The present amendment started out as a result of the demand for research in the southern States for handling the cotton situation. The Experiment Station Directors in the South and the USDA got together and developed a cotton research program. It was quite obvious to those of us working on the bill that when it got to Congress, we wouldn't get any regional legislation passed. Consequently, we suggested that it be made a national bill and that suggestion was made in light of these additional facts:

We had already submitted to Congress a bill on foods and human nutrition, and hearings had already been held on that particular bill in the House committee. Also, we had drafted a bill, approved by the Land-Grant College Association, on farm housing and farm structures. The Producers' Council, Johns Mansfield, etc., had submitted a bill that they were going to introduce to the Congress, which would not fit into the experimental setup at all. As a result Christenson, now with the Selvix folks, got together with them and prepared the Rural Housing Bill. In addition to that, there had been a bill floating around Congress, Wheeler-McMillan Bill, representing new plants. Then the folks in the West, where they grow a large amount of sheep...

At this point, a defect in the stenotype machine made it impossible for the reporter to take down the remainder of Dean Baver's statement.

## REPORTS OF STANDING COMMITTEES

Committee on Resource Utilization -Continued from p. 23.

## DISCUSSION

Cooper. Is the group ready to take action on the report submitted by Mr. Chance, before we recess for lunch?

Chance. Mr. Chairman, I move that the report of the Committee be adopted.

Davis. I second the motion.

Baver. I think it is important for us to know whether the proposal made by the Committee conflicts in any way with the program



## COMMITTEE ON RESOURCE UTILIZATION

Baver. under the Hope-Flannagan Act.

Chance. In my view, the Committee's proposal should facilitate the Hope-Flannagan program.

Coleman. Mr. Chairman, I then propose, as a substitute for the motion made by Mr. Chance, that this Conference approve the report submitted by the Committee on Resource Utilization, subject to the reservation that projects developed pursuant to the recommendations contained in the Committee's report shall integrate with or be supplementary to projects under the Hope-Flannagan Act.

Baver. I second the motion.

The vote was on the substitute motion, which was agreed to.

Cooper. We will now recess for lunch.

## ADDRESS OF DIRECTOR H. N. YOUNG

The Conference recessed for lunch at 12:30 p.m. At the luncheon session, Director H. N. Young, Agricultural Experiment Station, Virginia Polytechnic Institute, addressed the Conference (appendix, p. 71).

The Conference reconvened at 2:00 p.m.

## FEDERAL-STATE RELATIONSHIPS

Cooper. We are going to follow our luncheon discussion with what I am sure will be a very interesting discussion, that of federal-state relationship within the Tennessee Valley. It will be led and presented by an individual who needs no introduction. He has ideas and ideals and knows how to present them. I was pleased when he agreed to undertake this subject. Director Schaub.

Director Schaub's statement appears in the appendix, p. 75.

## DISCUSSION

Cooper. Is there discussion?

Davis. I'd like to ask a question. I am in accord with your philosophy, Dean. How would Congress solve it, Dean?

Schaub. I couldn't tell you how, but they will solve it sooner or later to the injury of the agencies and probably to the injury of the objectives.

Davis. I think you are right. I am just trying to see the way out. It is a difficult problem.

## PROCEEDINGS

Schaub. Far too often we tried to solve this problem. We spend too much time trying to find out why we can't rather than how we can.

Davis. I'd like a copy of your speech.

Clayton. It will be in the minutes.

Cooper. Is there any other comment?

For additional discussion of this topic see below.

Dietrick. I'd like to introduce Mr. James Gorsline, County Agent in this County, who just came in and brought us a box of apples.

## PROSPECTS FOR PHOSPHATE SUPPLY

Cooper. Our next discussion is in regard to prospects for an ample supply of phosphatic fertilizer in the Tennessee Valley by Mr. Neil Bass.

Mr. Bass' statement appears in the appendix, p. 80.

## DISCUSSION

Cooper. That is very valuable and important information. I have a question asked of me every once in a while by some farmer. When will we be able to get that kind of phosphate that we got before we started in the war, 47 per cent?

Bass. The answer is how soon will the fertilizer industry of this country equip themselves to produce that kind of fertilizer that the farmers are learning about from this program.

Cooper. Any discussion or questions?

Davis. I'd like to make an observation. I noticed farmers refer to this unit test-demonstration phosphate as free phosphate. I think we should caution the farmers not to be in the setup, if it's just for free fertilizer.

## FEDERAL-STATE RELATIONSHIPS

Cooper. Any other questions? We have had three friends with us today who have been very silent. Before we close, I want to call upon them. Mr. Moseley.

## DISCUSSION -Continued

Moseley. I am substituting for Davidson. I won't attempt to comment



## FEDERAL-STATE RELATIONSHIPS

Moseley. specifically on the complex problems that have been raised today. I do want to assure you of the continuing interest of PMA in these problems and in their possible solution. I was particularly interested in the questions raised by Dean Schaub as they relate to our action programs which we are responsible for administering in the field through county and community committeemen: Such as the agriculture and conservation programs, price support, commodity credit and loans, school lunch programs, production controls. Although I hate to use that word average, Dr. Young talked about at lunch, we are seriously interested, as you are, in finding the answer to these questions and I consider it a privilege to be here and hear this excellent discussion. Thank you very much.

Cooper. Thank you. Mr. Gaston.

Gaston. Dean Cooper, I am very glad indeed to have attended this Conference. I am a sophomore member of the Conference, having been appointed last fall because I am employed by the SCS. As in most of the institutions, a freshman better not be heard too much, and a sophomore shouldn't talk too much. I have tried to stay quiet. Jones knows that is hard for me to do.

I have two comments I'd like to make, both of a generalized nature.

On the basis of keeping the record straight--and perhaps I should have commented this morning about this, but I wasn't quick enough--Mr. Bayer, during the discussion of the Chairman's report this morning, you said that, according to the confidential information you had had, the Department was not interested in solving the problem of the Soil Conservation Service matter. I am speaking solely as one person. I have been conversant, I believe, with the major problems in connection with that particular item for the last several years, and I think I can safely say the Department would like to see it solved.

Now my next general comment is intended, as was the first, to be in the most friendly spirit; because I think no person recognizes better than I, or has, say, more sympathetic feeling regarding, the place of the land-grant colleges in American agriculture. I came through one of them; I have worked in three of them, in three different phases: Research, teaching, extension. The land-grant college is the keystone of public agricultural work in the United States. My comment is directed to Dean Schaub's statement, which I was very glad to hear, and which, basically, I agree with. I am glad the question is being raised, and has been in the past, and I hope that it will continue to be raised, because progress has been made by people searching and trying to meet these problems. This viewpoint arises, and has grown in me during the last twelve years, from observations it has been my opportunity to make while engaged in work extending throughout the United States, work to a large degree, though not wholly, in cooperation with people in various

## PROCEEDINGS

Gaston. agricultural land-grant colleges.

Dean Schaub said that the problem would be settled by Congress. Maybe. That isn't the way it should best be settled, perhaps. I am not sure but what it may be.

My own observations have been, and this is the first time I have said this publically, that the land-grant college people are inclined to put more emphasis on Federal action than on State action. Personally, as a Federal employee, I am glad to see that happen, because that makes it easier for the Federal employee. But, below the Federal level, the next, and perhaps the most important, legislation that we have is from the State legislatures. And I think, Dean Schaub, that there is, I'd say in at least more than one-half of the 48 States considerable confusion in the State.

There is within quite a number of the land-grant colleges themselves this confusion as between the experiment people and the extension people and the research and teaching people. That isn't bad, except where it is at too great degree. But there is a Biblical quotation, which I dare not try to quote, having something to do with the mote in the eye. Let's tackle all of those motes.

And let's not forget one other principle: In all of this agricultural work, it is not for us, repeating one of Dr. Young's ideas--we are not working for ourselves; we are working for the agricultural part of this society of 144 million people, represented primarily by approximately 6 million families on approximately 6 million farms. Too many times we agricultural workers seem to have in our basic conception that we are working for ourselves instead of working for them. And to the degree that that continues two things are happening: (1) the beneficial results accruing from public expenditures are less than they ought to be, and (2) we are shifting farther away from the kind of a true democratic society that our forefathers have tried to establish.

Baver. I want to tell Mr. Gaston that at this meeting we argue, but we forget about the argument, personally. So he should feel free to say what he wants. I meant to say this morning that I am led to believe that the Department is uninterested--not that the Department said it was uninterested.

Cooper. Mr. Williamson, do you have a word?

Williamson. Mighty nice of you, Dean. There are two reasons why I am here. It's been good today and I like to come. The luncheon meeting and the meeting this afternoon have been good. I expect each of us would disagree with Young and Schaub in some respects, but I think, in general, they are shooting close to where a bird is sitting. They have given us something to think about.



## OTHER BUSINESS

Cooper. Thank you, Bill. Take the greetings of this group back to the boys in Washington.

## OTHER BUSINESS

Cooper. Are there any other questions? Any other business to bring up?

Baver. Since we met in Biloxi, at the invitation of our good college in Mississippi, and had a wonderful time down there, one of the members of this group has passed away. I refer to the death of Director Clarence Dorman. I ask that we as a group rise at this time in memory of our departed colleague.

The Conference accordingly rose and stood in silence in memory of the late Director Clarence Dorman.

Gaston. I move that the committee and the hotel be thanked for the arrangements here today.

Brown. I second it.

The motion was agreed to.

Davis. Is there anything to refer to our committee? We didn't have a report to make.

Cooper. So far as I know there is nothing to refer to them. Any other matters? One other matter: The question of some **apples** to be issued here. I want to express to Mr. Gorsline our thanks for remembering us. Everyone take some of the apples with you.

Williamson. May I ask that the Directors of Extension meet over here immediately after the meeting.

Cooper. I want to express my appreciation to all who have taken part in this meeting. The meeting is adjourned.

Accordingly, the Conference adjourned at 3:20 p.m. to meet next on Wednesday, April 7, 1948 in Knoxville, Tennessee.

(For the Appendix to the Proceedings, see "Contents" on p. 31.)



## APPENDIX

## TENNESSEE VALLEY AGRICULTURAL CORRELATING COMMITTEE

PROCEEDINGS  
 TWENTY-SEVENTH VALLEY-STATES CONFERENCE  
 Martha Washington Inn, Abingdon, Virginia  
 Wednesday, April 2, 1947

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## VALLEY-STATES CONFERENCE

ROLL OF CONFERENCE 1/Alabama

Davis, P. O., Director, Agricultural Extension Service, Auburn

Georgia

Brown, Walter S., Director, Agricultural Extension Service, Athens

Kentucky

Cooper, Thomas, Dean, College of Agriculture and Home Economics, and  
Director, Agricultural Experiment Station and Agricultural Extension  
Service, Lexington

Mississippi

Coleman, Russell, Acting Director, Agricultural Experiment Station, State  
College

Jones, L. I., Director, Agricultural Extension Service, State College

North Carolina

Baver, L. D., Dean, School of Agriculture and Forestry, and Director,  
Agricultural Experiment Station, Raleigh

Schaub, I. O., Director, Agricultural Extension Service, Raleigh

Tennessee

Chance, Frank S., Assistant Director, Agricultural Experiment Station,  
Knoxville

McLeod, J. H., Acting Director, Agricultural Extension Service, Knoxville

McReynolds, E. C., Coordinator of Cooperative Programs, University of  
Tennessee, Knoxville

Virginia

Daughtrey, W. H., Administrative Assistant to the Director, Agricultural  
Extension Service, Blacksburg

-Continued

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1/ See text, p. 6 .



## ROSTER

Virginia -Continued

Dietrick, L. B., Director, Agricultural Extension Service, Blacksburg  
 Gorsline, James, County Agent, Washington County, Abingdon  
 Hutcheson, T. B., Dean, School of Agriculture, Blacksburg  
 Montgomery, C. A., Assistant Director, Agricultural Extension Service,  
 Blacksburg  
 Young, H. N., Director, Agricultural Experiment Station, Blacksburg

Tennessee Valley Authority

Bass, Neil, Chief Conservation Engineer, Knoxville  
 Lamke, E. A., Assistant to the Chief Conservation Engineer, Knoxville  
 McAmis, J. C., Director, Agricultural Relations Department, Knoxville

U. S. Department of Agriculture

Gaston, T. L., Assistant to the Chief, Soil Conservation Service, Washington  
 Moseley, C. Hilary, representing Mr. Dave Davidson, Director, Production  
 and Marketing Administration, Washington

Correlating Committee

Cooper, Thomas, representing land-grant colleges, Lexington, Kentucky  
 McAmis, J. C., representing Tennessee Valley Authority, Knoxville,  
 Tennessee  
 Clayton, C. F., Executive Secretary, Knoxville, Tennessee

PROGRAM 1/Morning Session

Opening of Conference . . . . . Thomas Cooper, Chairman  
 I. Report of Correlating Committee. . . . . Thomas Cooper, Chairman  
 II. Reports of Standing Committees  
 Committee on Organization. . . . . I. O. Schaub, Chairman  
 Committee on Cooperatives. . . . . L. I. Jones, Chairman  
 Committee on Extension and  
 Resident Teaching. . . . . P. O. Davis, Chairman

-Continued

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1/ See text, p. 6 .

## CORRELATING COMMITTEE

Morning Session -Continued

Committee on Research . . . . . L. D. Bayer, Chairman  
 Committee on Resource Utilization . . . . . F. S. Chance, Chairman

Luncheon Session

Arrangements have been made for a group luncheon at the Martha Washington Hotel beginning at 12:30. At the luncheon session, Director H. N. Young, Agricultural Experiment Station, Virginia Polytechnic Institute, will address the Conference.

Afternoon Session

- III. Discussion: Federal-State relationships  
       in the Tennessee Valley . . . . . I. O. Schaub, Leader
- IV. Discussion: Prospects for an ample supply  
       of phosphatic fertilizer in the Tennessee  
       Valley. . . . . Neil Bass, Leader
- V. Other business
- VI. Adjournment of Conference

REPORT OF CORRELATING COMMITTEE 1/  
       by  
       Thomas Cooper, Chairman

Progress ReportAgency Cooperation in the Tennessee Valley

At the last meeting of the Conference, on October 2, 1946, a report was made of the meeting on September 23, 1946, in Chattanooga, of the Special Committee on agency cooperation in the Tennessee Valley, and of the developments leading up to that meeting.

The Special Committee again met with the Correlating Committee in Knoxville, Tennessee on October 28, 1946. Present at this meeting were: Bass, Brannan, Cooper, Dykes, Jandrey, McAmis, Schaub, Clayton.

At this meeting there was presented a "Statement and Counter Proposal Made Jointly by Land-Grant Colleges and TVA Members of Special Advisory

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1/ See text, p. 6.



## AGENCY COOPERATION

Committee to the Committee on Cooperative Arrangements for Program Coordination for Agricultural Development in the Tennessee Valley" and also "Recommendations of the Tennessee Valley Authority to the Correlating Committee on the Disposition of Secretary Anderson's Letter of March 28, 1946."

Discussion developed the suggestion that a revision of the Statement and Counter Proposal be prepared and that the revised statement together with a draft of a proposed contract between each of the colleges and the U. S. Department of Agriculture be submitted to a subsequent meeting of the group.

At a meeting held in Washington, D. C. on February 22, these documents were presented and discussed.

In order to acquaint the Conference with the viewpoints and proposals developed at this meeting, I shall call on Mr. Bass at this point (text, p. 7 ).

Resignation of Mr. James G. Maddox

Mr. Maddox recently went on leave of absence from the Department of Agriculture and has therefore, resigned from the Correlating Committee.

A successor has not yet been appointed by the Department.

Other pending business

A number of items have been referred to the Correlating Committee for consideration. The Committee has found it desirable to defer a report on these items until certain broader questions of relationships and procedure are more fully clarified.

Additional Proposals and RecommendationsNext meeting of Conference

The Committee recommends that the next meeting of the Conference be held in Knoxville, Tennessee, on Wednesday, April 7, 1948.

Other

The Committee has no additional proposals or recommendations.

## SPECIAL ADVISORY COMMITTEE

PROPOSALS SUBMITTED TO SPECIAL ADVISORY COMMITTEE ON AGENCY  
COOPERATION IN THE TENNESSEE VALLEYMETHODS FOR COOPERATION IN SOIL AND WATER CONSERVATION WITHIN  
THE TENNESSEE RIVER WATERSHED AMONG TENNESSEE VALLEY AUTHORITY,  
STATE LAND-GRANT COLLEGES, AND SOIL CONSERVATION SERVICE, U. S.  
DEPARTMENT OF AGRICULTURE

(Suggestions made by USDA representatives on Special Advisory Committee,  
for discussion at meeting in Chattanooga, Tennessee, on September 23  
and 24, 1946)

The Tennessee Valley Authority, the seven Land-Grant Colleges, and the Soil Conservation Service, U. S. Department of Agriculture, each have public responsibilities in connection with soil and water conservation within the Tennessee River Watershed. The Tennessee Valley Authority and the Land-Grant Colleges also have other public responsibilities. Each of these agencies recognizes that maximum benefit from utilization of available public resources will result only through agency cooperation in attainment of conservation objectives. Suitable procedures for public agency cooperation must be based upon common understanding of principles and a wholehearted desire for complementing and supplementing each other's activities towards attainment of conservation objectives. The following principles are suggested for mutual understanding between the above-mentioned agencies, as a basis for effective cooperation in complementing and supplementing each other's activities in soil and water conservation work within the Tennessee River Watershed. These principles are that:

1. Primary responsibility for soil and water conservation rests with landowners and operators. Farm owners and operators will voluntarily accept and discharge this responsibility as they understand its importance to the welfare of themselves and the Nation, and the public agencies working in this field give them guidance and assistance in solving their conservation problems.
2. Many soil and water conservation problems can be economically and effectively met only by local owners and operators of lands working in unison. Local farmers need, therefore, a well-established way of working together which they can use when they so desire and through which conservation guidance and assistance may be made available.
3. Conservation assistance of public agencies can be most efficiently made available, on a wide-scale basis, if farmer groups use a local approach that is somewhat common throughout wide areas of the country, for exercising their own initiative and responsibility in soil and water conservation. Sound criteria for such farmer groups indicate that they should be: (a) public entities, established by landowners and operators under State law through time-honored processes of petition, referendum, and election; (b) managed by a governing body, at least the majority of which is democratically elected; (c) concerned solely with carrying on work



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necessary to achieve soil and water conservation; and (d) free to request and receive cooperation and assistance from local, State, and Federal public agencies and from private sources.

4. These local entities should be the primary instruments for integrating all local conservation activities including work on unit test-demonstration farms.
5. Local, State, and Federal public agencies, other than the three above-mentioned, have conservation responsibilities within the Tennessee River Watershed which must be recognized in developing and carrying out resource conservation activities.
6. The end result of conservation work is on the land. The conservation objectives of public agencies--State, regional, and national--is to help achieve fundamental agricultural betterment on individual farms, in localities, in States, in regions, and throughout the Nation. Cooperation between the three above-mentioned agencies to achieve this goal in the Tennessee River Watershed should involve, at least, four separate activities; (a) conservation plans--application and maintenance--for farms, designed to fit the land and suit its owners and operators; (b) conservation programs developed and carried out by local self-governing farmer groups; (c) State conservation program for the Valley part of the State; and (d) a Valley-wide conservation program. The latter three will of necessity be statements of general conservation conditions, problems, and solutions. And, public activities necessary to accomplishment of the maximum quantity of sound soil and water conservation work may be generally classified into three classes--research, education, operations.

In view of these principles, it is suggested that the agencies mutually consider the following procedure for cooperating in the work of the test-demonstration program and the work of the Soil Conservation Service.

A. At the Local Level

1. The Extension Service and Experiment Station of the Land-Grant Colleges, the TVA, and the Soil Conservation Service will jointly assemble, review and interpret, county by county through teams of workers;
  - a. Available conservation research information applicable to the area,
  - b. Pertinent farmer conservation experience in the area, and
  - c. Additional information--such as reconnaissance conservation surveys and classifications of farms--essential to sound recommendations to farmers, concerning ways and means of their best solving their conservation problems.

The order of priority of counties for this assembly, review, and interpretation will be determined by the State Soil Conservation Advisory Committee

## SPECIAL ADVISORY COMMITTEE

upon recommendations of the program subcommittee proposed in a following section. These recommendations should be based on such factors as: farmer interest as portrayed by requests of petitions to the State Extension Director of the State Soil Conservation Committee, comparative severity of soil and water conservation problems, and availability of personnel for the work.

The team working in a county will select its own chairman, and will be expected to finish the work in not more than three months after the team is established. It will prepare a report on land conditions and soil and water conservation needs within the county, and develop a short concise statement of its report which it will make available to the local press, farmer groups, and other interested local organizations. The report and copies of the shorter statement will be transmitted to both the State Soil Conservation Advisory Committee and its program subcommittee.

2. Extension Service, with assistance as requested from and available through the Station, TVA, and Soil Conservation Service, will present the above report to local farmer groups as a guide to their determining their actions. This will be done as early as practicable after the report is available and through well-organized farmer meetings, news letters, mimeographs, and otherwise.
3. The State Soil Conservation Advisory Committee will present the report to the State Soil Conservation Committee as an aid to it in carrying out its responsibilities.
4. If farmers establish a local entity to carry on conservation work, it will be responsible for developing: (a) a program, outlining its long-time conservation objectives; and (b) a work plan, indicating how it will carry on its activities to achieve its long-time objectives.
  - a. The entity will be advised to ask the State Extension Director, the State Experiment Station Director, the General Manager of TVA, and the SCS State Conservationist-- and such other agencies as may be in position to assist-- to each designate a qualified employee as its representative to serve on a technical committee to assist it in developing its program and its work plan. Members of such an advisory technical committee will select their chairman. The report under 1 above will be made available to this technical committee.
  - b. If the entity requests assistance from the agencies in carrying on work outlined in its program and its work plan, the State Extension Director, the State Experiment Station Director, the General Manager of TVA, and the State Conservationist, Soil Conservation Service, in the interest of avoiding duplication and of obtaining the most effective distribution of available resources, will mutually discuss the types and amounts of assistance which each can make available. Each agency will separately make necessary arrangements with the entity for rendering the assistance it is in position to make available, and will inform the other agencies of the arrangements developed.



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- c. Each of the agencies will encourage each local entity it is assisting to obtain the assistance of the State Soil Conservation Committee and the cooperation of other local public agencies and public institutions such as primary and secondary schools, service clubs, municipalities, road and highway departments, and of private individuals.

B. At the State Level

There will be established in each State a program subcommittee of the State Soil Conservation Advisory Committee to:

- (1) Recommend the order of priority of counties for the assembly, review, and interpretation of pertinent information suggested in an earlier section to be carried out by teams of workers.
- (2) Develop suggestions which such teams should follow in carrying forward their work within each county.
- (3) Work with other public agencies which have conservation responsibilities in the Tennessee Valley Watershed in developing suggestions for use by local entities in improving their programs and work plans.
- (4) Keep acquainted with the administrative arrangements used by each agency in rendering assistance to local entities, and to recommend to the proper administrative officers of each such agency, improvements in such arrangements.

This subcommittee will consist of one member to be designated by the Land-Grant College, one by the TVA, and one member of the State Soil Conservation Committee designated by the chairman and one designated by the State Conservationist of the Soil Conservation Service. Subcommittee members will elect their chairman at least annually. It is hoped that this program subcommittee would be enlarged, as soon as practicable, to include representatives of other State and Federal agencies having conservation responsibilities in the Valley-part of the State. Then, it should develop a conservation program of resource treatments based upon land conditions and conservation needs by land classes and major ownership patterns.

C. At the Valley-Wide Level

There will be established a Valley Conservation Committee to: (1) study and make recommendations concerning needs for State conservation programs for Valley areas; (2) make suggestions to State program subcommittee for improving their work; and (3) keep acquainted with administrative arrangements used by the agencies in rendering conservation assistance, and to recommend to the proper administrative officers of each such agency, improvements in such arrangements.

This valley Conservation Committee will consist of the Executive Secretary of the Correlating Committee as chairman, one member designated by the seven Land-Grant Colleges, one member designated by the TVA, and

## SPECIAL ADVISORY COMMITTEE

the Assistant Regional Conservator, Southeastern Region, Soil Conservation Service. It is hoped that this Valley-wide committee would be enlarged, as soon as practicable, to include representatives of other State and Federal agencies having conservation responsibilities in the Tennessee River Watershed. Then, it should develop a conservation program of resource treatments based upon land conditions and conservation needs by land classes and major ownership patterns.

Although these suggestions concern primarily the area within the Tennessee River Valley, we believe the principles are also equally applicable in the areas of the seven States outside the watershed.

PROGRAM COORDINATION FOR AGRICULTURAL DEVELOPMENT  
IN THE TENNESSEE VALLEY

(Statement and Counter Proposal made jointly by land-grant college and TVA members on Special Advisory Committee, for discussion at meeting in Washington, D. C., on February 22, 1947)

The proposal for program coordination made by the U.S. Department of Agriculture representatives at the Special Advisory Committee meeting in Chattanooga on September 23 and 24 is encouraging in one very important respect: it reaffirms a basic principle of the Memorandum of Understanding in recognizing that the Tennessee Valley area merits unique consideration administratively, in accord with the action of Congress whereby a regional agency and a regional program were established and authorized. The Soil Conservation Service, of course, has statutory responsibilities for dealing with problems of soil and water conservation throughout the country. The statute under which it operates does not exclude the Tennessee Valley area from its responsibility. To the extent that the Soil Conservation Service possesses, through its broad experience, special competence in this field, its contribution should be made in the Tennessee Valley area. The Tennessee Valley Authority Act also places definite responsibilities on the TVA for water and soil conservation. The problem of coordination in the Tennessee Valley is, then, one of utilizing the abilities and experience of both agencies in such a way as will meet their respective obligations and at the same time will further the regional program provided for in the Tennessee Valley Authority Act. The special problems and opportunities of the Tennessee Valley fully justify a particularized approach on the part of all agencies concerned with this area. The land-grant colleges and TVA are prepared to justify and support such arrangements even though they differ from the more general patterns which may be considered to be applicable and more appropriate elsewhere in the nation.

In other important respects the USDA proposal fails to meet the requirements of the regional program. Specifically:

1. The U. S. Department of Agriculture proposal seeks to deal with soil conservation (and by implication with other activities of vital concern to the regional program) as a subject distinct and separate from the agricultural and industrial development of the Tennessee Valley, whereas the Memorandum of Understanding provides



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for the opposite approach. The U.S. Department of Agriculture proposal would make it more difficult to achieve an integrated approach to all the problems of the farm and farm community by separating out the problem of soil conservation and establishing particularized channels to deal with this problem. It seems to assume that the experiment in regional development in the Tennessee Valley is merely in terms of a geographic area, and that the regional program is merely the sum of governmental programs in the area.

2. The proposal fails adequately to recognize the Memorandum of Understanding now existing between the Department, the colleges of the Valley States and the TVA under which the regional program has been carried forward for over twelve years, which in turn was based on the general Memorandum of Understanding existing since 1914 between the Department and the land-grant colleges. Moreover, the Department's proposal seems inconsistent with the long-standing reliance of the federal government on education as the most effective and desirable method for achieving agricultural development and adjustment. It thus minimizes the long-effective relationships between the colleges and the Office of the Extension Service as a means through which the Department may express national programs within the states, and in this instance within the Tennessee Valley region. At the local level it ignores the role of the county extension staff by proposing a duplicating staff organization to deal directly with farm people on subjects traditionally within the responsibilities of the county agent relating to the planning and conduct of the county program with the farm people--a program which is now effectively operating with the understanding and support of these people.
3. The U.S. Department of Agriculture proposal seems to ignore the fact that farm groups, farm organizations, and associations of farmers have for many years been active in development of the regional program in the Tennessee Valley. Elaborate and complex coordinating bodies, committees and new or reorganized local organizations are proposed as a condition precedent to making available in the Valley benefits of SCS and an equitable portion of the federal funds appropriated for soil conservation activities.

The machinery proposed would duplicate or supersede, not supplement or strengthen, the existing relationships and arrangements with local farm organizations. These new arrangements, furthermore, would force the Valley States colleges and TVA to abrogate existing agreements with these organizations. Obviously this cannot be done. Therefore, these requirements must result in duplication and confusion.

4. The USDA proposal fails to recognize that under existing arrangements considerable and consistent progress has been made at coordinating various governmental programs into a regional program at the state and county levels, as well as at the

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regional level. The experience in this program indicates that the addition of necessary personnel to the county extension service staff is an effective way of securing an integrated and unified county agricultural development program on a decentralized basis. While it is clear that improvements can be made, no evidence or argument has been advanced as a basis for rejecting this arrangement. Insofar as the problems of regional coordination have their origins at the federal or regional level, perhaps they can be cured largely in the Department itself as between the Office of Extension, Farm Security (FHA), FCA, SCS, etc., or between the colleges, TVA and the Department through the Correlating Committee.

Our Suggestions and Proposals

Improvement in carrying out the regional program can be secured more readily by building on the existing machinery and relationships which have characterized the regional program for over 12 years. This would suggest that programs can best be achieved by:

- a. Facing the primary issue that led to the creation of the Special Committee, namely, how can a fully integrated county program be developed so long as SCS technicians maintain direct and independent contacts with farmers in a special subject matter field that should be an integral part of the over-all county and regional program?
- b. Dealing with the other problems of program and administrative coordination (especially those identified in the Secretary's letter of March 28) within the existing framework of relations (as suggested at the Chattanooga meeting on September 23 and 24. See attachment.).

\* \* \* \* \*

If possible, whatever is worked out to bring the SCS into the Valley program should suggest a pattern for meeting the other important but less pressing problems of interagency relationships. With this in mind it is proposed to reaffirm:

1. The soundness of building the program on the organizations and arrangements already well established at the county level.
2. The desirability in the Tennessee Valley of meeting the special problems of regional development and coordination consistent with the historic pattern, established and clearly defined in the basic Memorandum of 1914 between the colleges and the Department, by placing major reliance on education and hence on the established educational institutions, including the county agent at the local level.
3. The economies of a coordinated and intergrated approach to problems of agricultural development and watershed protection in the Tennessee Valley based on elimination of overlapping staff, functions, and objectives.



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4. The necessity in the Tennessee Valley of tailoring the methods for achieving SCS goals and objectives (soil and water conservation) to the particular conditions and established programs and administration and organization arrangements in the counties.

Specifically, it is proposed that;

In the Tennessee Valley at the county level the objectives and responsibilities of the Soil Conservation Service as they involve direct dealings with farmers and farm people be fulfilled by contractual arrangements (comparable to those between TVA and the colleges) providing for the reimbursement of the colleges for expenditures made pursuant to such contracts (direct grants-in-aid to the colleges would be an alternate method of financing this work);

At the state level the U.S. Department of Agriculture arrange with the Valley States agricultural colleges for the provision of the necessary soil conservationists as joint employees to work on problems of over-all cooperation, coordination, and evaluation within the Tennessee Valley area in relation to meeting SCS objectives and responsibilities;

At the regional level problems of coordination, of research, extension, land-use planning, educational activities, etc., which are related to a unified, regional agricultural program be dealt with through the Correlating Committee and the Valley States Conference.

\* \* \* \* \*

These proposals might appropriately be implemented by the following steps:

1. The Correlating Committee should through the colleges and through the established machinery of the Valley program (adapted as may seem appropriate in the light of experience) continue to determine the substantive additions and adjustments in content or emphasis to the Valley program.
2. The Soil Conservation Service should indicate the general nature of the additional activities which it feels are necessary to meet its objectives and responsibilities in the Tennessee Valley.
3. On the basis of these general determinations, then, the Correlating Committee should, on behalf of the U.S. Department of Agriculture and the Soil Conservation Service, ask the colleges to decide in specific terms what must be done to accomplish the objectives and responsibilities of SCS (as developed according to the immediately preceding paragraph numbered 2 above) in the portions of their states lying within the Tennessee Valley. The estimates of the colleges should include substantive program activities as well as the number of additional personnel required in the county agent's office to accomplish the purposes of SCS. These personnel estimates would be in terms of staff needed to

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do work not now actively a part of the Valley program or to accelerate particular phases of that program.

4. The determinations of the colleges should then be reviewed, revised, and approved by SCS, as necessary. (This pattern of relationships is comparable to that which TVA has followed in asking the colleges to develop the county program and the role of TVA in that program. The colleges' conclusions in this respect are, of course, always subject to the review and approval of TVA. A copy of the master contract, together with a project agreement, is attached for illustrative purposes. 1/
5. The conclusions which would result from following the procedure suggested in the preceding steps should, then, be incorporated into a pattern of contractual relationships under the Memorandum of Understanding between SCS and the colleges generally comparable to the existing pattern between TVA and the colleges. The contractual documents envisaged in the proposal would presumably include a master contract, one or more project agreements, and the appropriate work plans and projects for the current year. They would reflect agreement as to the work to be done and the additional personnel to be employed by the colleges subject to reimbursement, and would provide the contractual basis by which SCS could evaluate work accomplished. (A suggested contract relative to SCS activities is attached for illustrative purposes.)

RECOMMENDATIONS OF THE TENNESSEE VALLEY  
AUTHORITY TO THE CORRELATING COMMITTEE ON  
THE DISPOSITION OF SECRETARY ANDERSON'S  
LETTER OF MARCH 28, 1946

(Statement submitted by TVA representatives on Special Advisory Committee at meeting in Knoxville, Tennessee, on October 28, 1946)

The SCS Issue

The TVA recommends that the Correlating Committee transmit this question immediately to the Special Joint Committee with a request that the Special Joint Committee study the problem with the intent of proposing procedures for dealing with it, and report back to the Correlating committee not later than 1 January 1947.

Item 1. Survey of Need for Public Forest Land Acquisition

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1/ These documents are not included here.



## SECRETARY'S LETTER

Item 2. Coordinated Forest Research ProgramItem 3. Duplication of Effort in Forestry

TVA recommends that the Correlating Committee refer these three sections of the Secretary's letter to the U.S. Forest Service and to the TVA for joint study, and that these agencies be requested to submit a joint report on these items to the Correlating Committee not later than 1 January 1947.

Item 4. Suggestions on Research

The TVA recommends that the Correlating Committee supplement the membership of the Advisory Committee on Research with appropriate representation of the USDA and TVA and that this item be referred to the Committee on Research for study. The Committee on Research should be requested to report back to the Correlating Committee not later than 1 April 1947.

Item 5. Improved Working Relationships with Action Programs

TVA has the following recommendations to make:

1. The Correlating Committee should ask the Rural Electrification Administration and the TVA to jointly study their existing relationships and to submit a joint report to the Correlating Committee not later than 1 January 1947. This report should cover problems of coordination and proposals for more effective joint action.
2. The Correlating Committee should request the Committee on Cooperatives to appropriately augment its membership and consider the relationships of the Farm Credit Administration to the Valley program, and report back to the Correlating Committee not later than 1 January 1947.
3. The Correlating Committee should request the Committee on Extension and Resident Teaching to consider the relationships of the Farmers Home Administration and of the field branch of the Production & Marketing Administration to the joint Valley program, and report back to the Correlating Committee not later than 1 January 1947.

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DRAFT OF PROPOSED CONTRACT BETWEEN  
THE \_\_\_\_\_ STATE COLLEGE AND THE  
UNITED STATES DEPARTMENT OF AGRICULTURE  
RELATIVE TO THE REGIONAL AGRICULTURAL  
PROGRAM

(Attached to Statement and Counter Proposal made jointly by land-grant college and TVA meeting on Special Advisory Committee, for discussion at meeting in Washington, D. C., on February 22, 1947)

This contract, made and entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 1947, between the United States Department of Agriculture, on behalf of the Soil Conservation Service, and \_\_\_\_\_ State College, hereinafter referred to as "Institution."

W I T N E S S E T H

WHEREAS,

The Congress has recognized that the wastage of soil and moisture resources on farm, grazing and forest lands of the Nation, resulting from soil erosion, is a menace to the national welfare; and by the Soil Conservation and Domestic Allotment Act of 1935 has declared it to be the policy of the Congress to provide permanently for the control and prevention of soil erosion, thereby to preserve natural resources, control floods, prevent impairment of reservoirs and maintain the navigability of rivers and harbors; and the Soil Conservation Service of the United States Department of Agriculture has been established for the execution of such policy; and

The Secretary of Agriculture is specifically authorized in carrying out activities under the Soil Conservation and Domestic Allotment Act of 1935 to cooperate with any governmental agency, to enter into agreements with any governmental or other agency, and to furnish financial or other aid to governmental or other agencies;

AND WHEREAS,

The Congress has recognized the Tennessee River Valley as a region in which an intensive program of natural resource development is required in the regional and national interest; and by the Tennessee Valley Authority Act of 1933 has created the Tennessee Valley Authority for the purpose of furthering such unified development of the Tennessee River and its watershed, in cooperation with other Federal, State, and local agencies; and

The watershed conservation and other agricultural aspects of the unified cooperative Tennessee Valley program have for purposes of administration been identified by a Memorandum of Understanding among the United States Department of Agriculture, the Tennessee Valley Authority, and the agricultural colleges of the States of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee and Virginia, relative to systematic procedure for a coordinated soil and soil building program of agricultural research, extension, and land-use planning within the region of the Tennessee Valley.



## PROPOSED CONTRACT

The regional program carried out cooperatively by the Tennessee Valley Authority, the land-grant colleges of the seven valley states, and the United States Department of Agriculture, merges broad measures for watershed protection and agricultural development to reduce the loss of soil and water in agricultural areas, which would otherwise result in the destructive silting of channels, and the concentration of flood waters; and to extend the use of improved soil tillage, improved crops and cropping systems, new forms of mineral nutrients, and improved methods of fertilization; and

The regional program of resource development of the Institution, in cooperation with the Tennessee Valley Authority, attacks soil erosion which is one aspect of deeper and far-reaching maladjustments involving soil fertility, the uses of land and the needs of the people who live on the land; and

Farmers in the Tennessee Valley region have established associations organized under the state laws in all of the Valley counties and have assumed responsibility for land and water conservation and soil fertility in cooperation with Institution, Tennessee Valley Authority and the United States Department of Agriculture.

## AND WHEREAS,

The Soil Conservation Service has accumulated a fund of technical information built up over many years' experience in combating soil erosion and could bring the accumulation of technical and administrative skills to supplement the program, personnel and community leadership developed in thirty years' experience by the Institution's Extension Service; and

The existence of the regional resource development and watershed protection program carried forward in the Tennessee Valley through cooperative participation by Federal, State and local agencies and by farm people for the past thirteen years, warrants adaptations, within the limits of administrative discretion, in the manner of conducting Soil Conservation Service activities in the Tennessee Valley region; and

Experimental adaptation of administrative patterns in connection with the regional program promises mutually helpful results in more rapid, effective and enduring adjustments of farming to the total resources of the region, in harmonious working relationships consistent with the unified development of the region, and in unified advice to the farmers; and

Control and utilization of water on individual farms of the region is a complex problem to which complementary parts of a total answer are contributed by engineers, agronomists, soil scientists, teachers, and other technicians through service activities, advice, and technical and economic investigation, these elements being brought together within the regional program of agricultural development by a broad process of education to fit the requirements of each farm operation and to be absorbed into the way of farm living; and

Unified dealing with farmers on the basis of the integrated regional program already established in the various counties of the Tennessee Valley

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watershed constitutes an effective and the least costly means of securing adoption of water control and utilization measures on individual farms, with least confusion to the farmer in that region; and

It is mutually desired to use the established regional program and its administrative relationships, as identified by the Memoranda of Understanding among the United States Department of Agriculture, the Tennessee Valley Authority and the agricultural colleges of the States of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee and Virginia, to coordinate the phases of the research, extension, land-use planning and educational activities of these agencies which are related to a unified regional agricultural program;

THEREFORE, be it agreed as follows:

I. Purpose and Policy

- A. Purpose. It is the purpose of this contract to advance the knowledge and use of soil conservation and erosion control measures in the Tennessee Valley counties of the State of \_\_\_\_\_, in harmony with the regional program of watershed protection and agricultural development carried on under the joint sponsorship of the Institution, the United States Department of Agriculture and the Tennessee Valley Authority.
- B. It is the policy of this contract, as it bears on relationships between Institution and the Soil Conservation Service:
  1. To carry out the responsibilities assigned to the Soil Conservation Service by the Soil Conservation and Domestic Allotment Act of 1935 and by subsequent legislation in connection with conservation of the soil resources on private lands so as to make effective the purposes of the Memoranda of Understanding among the land-grant colleges of the Tennessee Valley states, the Tennessee Valley Authority, and the United States Department of Agriculture, in coordinating the activities of the Soil Conservation Service and the Institution as they relate to the unified, regional agricultural program.
  2. To maintain cooperative relationships consistent with the unified development of the region and to maintain unity of advice, service, and information to the individual farmer.
  3. To build upon and strengthen existing local institutions in carrying out intensive and widespread erosion control.
  4. To integrate activities relating to erosion control and soil conservation with the regional program of resource development in such a way as to make for enduring patterns of more efficient farm management and better rural living.



## II. Mode of Operation

The parties to this agreement will, in accordance with the cooperative administrative procedures outlined herein, undertake investigations and provide advisory services and technical assistance within such counties in the State of \_\_\_\_\_ as may be agreed upon.

## A. Investigations.

Investigations and scientific experiments consistent with the regional program and yielding information on the extent, nature and causes of soil losses shall be undertaken as the parties shall mutually find to be needed to meet their program requirements and legislative authorizations.

1. Definition. Investigations and experiments conducted by the Institution through its agricultural experiment station, pursuant to the provisions herein agreed to, shall be new projects or extensions of projects now in progress, initiated by the Secretary of Agriculture on behalf of the Research Division of the Soil Conservation Service, or by the Institution independently or in cooperation with the Research Division of the Soil Conservation Service, having a direct bearing on the conduct of the program of soil conservation and erosion control within the Tennessee Valley region, including but not limited to the following aspects:
  - (a) Behavior of, and significant differences between localized soil types and phases with respect to soil erosion and water loss.
  - (b) Effects and improvement of cover on soil erosion, including non-intertilled crops and forests.
  - (c) Refinement of engineering and other physical measures in their application to the soil erosion and water control problem, including but not confined to contour cultivation, strip cropping practices, terracing, check dams and farm ponds.
  - (d) Design and refinement of practicable drainage systems adapted to local needs.
2. Relevance to Program. Information developed by scientific investigation is essential to maximum efficiency in furthering measures of erosion control fully adapted to local needs, prevailing soil types and type of farming, both in the provision of sound technical advice and assistance and in the wholehearted application and long-term continuation of erosion control measures.
3. Respective Obligations. In the conduct of investigations and experiments, the parties agree as follows:

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(a) Institution will, to the maximum extent possible:

- (1) Make available its libraries, the results of investigations and experiments, and the aid of its staff in the interpretation of existing data.
- (2) Make available in such manner and to the extent required for efficient and economic operation its research laboratories, experimental farms, facilities, and personnel.
- (3) Extend and intensify investigations already in progress, or undertake new investigations at the request of the Soil Conservation Service, as may be mutually agreed upon.
- (4) Employ such new personnel and provide new facilities to the degree required for the extension of existing investigations or for the conduct of new experiments and investigations.
- (5) Make available its staff for collaboration with representatives of the United States Department of Agriculture and other agencies in assembling, interpreting and publishing data which may from time to time be applicable to particular phases of this program.

(b) The Soil Conservation Service will, to the maximum possible extent:

- (1) Make available its technical staff, research data, and other resources in the cooperative evaluation of present knowledge and current data.
- (2) Develop in collaboration with appropriate officers of the Institution proposals for research.
- (3) Provide funds, within the allocations for such purposes, to the extent required to supplement the resources of Institution.
- (4) In collaboration with the appropriate officials of Institution, review periodically and upon completion, activities undertaken with a view to maximizing the usefulness of results, correlating efforts with program needs, and developing lines for further research.

B. Technical Assistance to Farmers.

1. Definition. Technical assistance includes those field activities necessary in providing information concerning, and



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securing acceptance of, measures to protect the soil; specifically, advice and assistance to farm operators and owners individually and in organized groups, in securing the best adaptation of land-use to land capacities within the limits of sound conservation practice, with regard particularly to appropriate mechanical phases of water control such as contour furrowing, strip cropping and terracing, and to integration of these phases with agronomic adaptations such as proper crop rotation, use of non-intertilled crops, and re-assignment of use from tilth to pasture or woodland.

2. Relevance to Program. Provision of technical advice and assistance through cooperative arrangements to farmers and groups of farmers is essential.
  - (a) To secure the most widespread and prompt adoption of control measures, without duplication, waste effort, or confusion.
  - (b) To maintain the highest possible degree of integration between practical conservation measures and the management of the entire farm, with full regard to the unique factors and problems which must be harmonized on each management unit.
  - (c) To coordinate application of soil erosion control measures with methods of the established regional resource development program, with due regard to the key device of test-demonstration farms and their effect on the community, both as individual demonstrations and as area demonstrations.
3. Respective Obligations. In the joint execution of the Technical Assistance aspect of this agreement, the parties respectively undertake as follows:
  - (a) Institution will, to the maximum possible extent:
    - (1) Make use of present personnel and facilities of the Agricultural Extension Service, including the administrative organization, subject matter specialists, supervisors and county agricultural agents.
    - (2) Provide additional personnel and facilities, as called for in subsequent Project Agreements, as far as available personnel and duties will permit, and as required economically and efficiently to carry out the terms of this agreement.
    - (3) Encourage farmer cooperative associations now established in all Valley counties to take the initiative in developing community and county estimates of soil erosion problems, and assist in preparation of corresponding work plans by areas for specific control measures.

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- (4) To develop annually or otherwise as may be mutually agreed, plans of work for the State of \_\_\_\_\_.
  - (5) To assist farmer cooperative associations in matters including but not limited to acquisition and operation of facilities and equipment, membership activities, maintenance of services, and other management problems.
  - (6) To assist individual farm operators and farm owners to prepare farm plans integrating erosion control and soil conservation measures into the overall activities of each farm, and to advise farmers on technical solutions to individual erosion problems, including farm plans which will include the interests of the Soil Conservation Service.
- (b). The Soil Conservation Service will, to the maximum possible extent:
- (1) Within the allocations for such purposes and in accordance with Project Agreements made under this agreement, provide funds to Institution for the employment by the Agricultural Extension Service of required additional members of the Extension Staff, and for the provision of required additional facilities. Additional personnel and facilities will be in addition to and coordinated with the assistant county agents and specialists already working in the regional agricultural development program.
  - (2) Make available as required for employment by Institution technical personnel from the Soil Conservation Service to participate directly in the administration of the program, as assistants to county agents and as advisory technical specialists.
  - (3) Provide, as funds are authorized and available for this work, equipment and material such as recommended varieties of seed, seedlings, etc., for distribution in furtherance of erosion control activity.

## III. Administration of Projects.

## A. Method for Developing Project Agreements.

All activities pursuant to the foregoing Article II should be effectuated in accordance with the provisions of projects formulated and submitted in writing by the appropriate agency of Institution, and mutually agreed to and signed by the duly authorized representatives of each party, namely:

- 1. As to Investigations:



## PROPOSED CONTRACT

For the Soil Conservation Service: \_\_\_\_\_

For Institution: The Director of the Agricultural Experiment Station.

2. As to Technical Assistance:

For the Soil Conservation Service: \_\_\_\_\_

For Institution: The Director of the Agricultural Extension Service.

B. Project Provisions.

1. Project Agreements, in the form of a supplementary contract, shall define each activity. All projects for the conduct of particular activities hereunder submitted by appropriate agency of Institution to the Soil Conservation Service for approval shall contain a comprehensive and detailed statement defining and explaining the purposes and objectives of such activity and the procedure by which it shall be accomplished, as follows:
  - (a) Object and purpose of the project in relation to this cooperative program.
  - (b) Summary of anticipated results.
  - (c) A definition of geographic area if appropriate to the project.
  - (d) Method of procedure.
  - (e) Duration.
  - (f) A detailed account of all facilities and personnel to be directly engaged by salary and position.
  - (g) A budget of estimated expenditures showing the items to be paid by the designated agency of Institution, and by the Soil Conservation Service.
  - (h) Method of reporting progress and compiling results.
  - (i) Method of publishing or otherwise disseminating results, together with such approval as may be required for publication of results.
2. Expenditures and Reimbursements.
  - (a) An annual budget shall be jointly agreed on for all projects, based on the fiscal year.
  - (b) The Institution shall furnish and disburse the funds required to meet the expenditures for which the Soil Conservation

## SPECIAL ADVISORY COMMITTEE

Service is obligated, as specified in any projects formulated and approved under the terms of this agreement. On or before the first of every calendar month, the Institution shall submit to the Regional Conservator properly certified invoices (in triplicate) covering such disbursements during the previous month, together with receipted vouchers in support thereof. The Soil Conservation Service shall have the right, during the usual hours of business, to examine the books and records of the Institution exclusively for the purpose of verifying such expenditures. Upon receipt of such data, the Soil Conservation Service shall reimburse the Institution for the amount of such invoices as soon after the first day of each calendar month as vouchers thereon can be prepared.

- (c) Expenditures and reimbursements made hereunder shall comply with all Federal regulations applicable to handling, disbursing and accounting for public funds; and shall comply with administrative procedures to be established by the Institution in cooperation with the State Treasurer or other appropriate officer and approved by the Soil Conservation Service.
- (d) It is mutually understood that all facilities and equipment acquired by the Institution in effectuating the terms hereof, and for which the Institution has been reimbursed hereunder shall become and remain the property of the Soil Conservation Service. An accurate inventory of all such facilities shall be maintained by the Institution, subject to inspection at any time by the Soil Conservation Service, and following each accounting period ending December 31 and June 30, a true and complete copy of said inventory shall be submitted by the Institution to Soil Conservation Service. On the termination of this agreement, such property shall be turned over to the Soil Conservation Service.

3. Future Legislative Appropriations. All commitments hereunder shall be subject to legislative appropriations of funds to the respective parties.

#### IV. Duration.

The term of this contract shall run until June 30, 194\_\_, and thereafter from year to year unless terminated by notice in writing by either party to the other thirty days before the end of any fiscal year.



MINUTES OF MEETING OF TENNESSEE VALLEY  
AGRICULTURAL CORRELATING COMMITTEE WITH  
SPECIAL ADVISORY COMMITTEE ON INTERAGENCY  
RELATIONSHIPS IN THE TENNESSEE VALLEY,  
WASHINGTON, D. C., FEBRUARY 22, 1947

The meeting of the Special Advisory Committee was called to order by Dean Thomas P. Cooper, at 9:45 A. M. on February 22, 1947, in Room 212, Administration Building, U. S. Department of Agriculture, Washington, D. C.

The following persons were present:

Neil Bass, Chief Conservation Engineer, Tennessee Valley Authority  
Charles F. Brannan, Assistant Secretary, U. S. Department of Agriculture  
Thomas P. Cooper, Dean College of Agriculture, and Director of Agricultural Extension Service and Experiment Station, University of Kentucky  
J. C. Dykes, Assistant Chief, Soil Conservation Service, U. S. Department of Agriculture  
J. C. McAmis, Director, Agricultural Relations Department, Tennessee Valley Authority  
I. O. Schaub, Director, Agricultural Extension Service, North Carolina State College  
C. F. Clayton, Executive Secretary, Tennessee Valley Agricultural Correlating Committee

At the request of Dean Cooper, Mr. Bass presented for the special committee's consideration "Statement and Counter Proposal Made Jointly by Land-Grant College and TVA members of Special Advisory Committee to the Committee on Cooperative Arrangements for Program Coordination for Agricultural Development in the Tennessee Valley" and a "Draft of a Proposed Contract between the State College and the United States Department of Agriculture Relative to the Regional Agricultural Program" (copies of these documents are attached).

The two documents represent a joint suggestion by the Institutions and TVA of how the Institutions could meet various questions which have arisen in the past and how jointly the Soil Conservation Service, through the Department of Agriculture, Colleges and TVA could combine their work in a unified program within the Tennessee Valley.

Dean Cooper called for discussion of these two proposals. Mr. Brannan started the discussion by stating that the people who have worked on the contract have done a lot of hard and capable work and that if the point of view as expressed in the contract could be accepted he could not think of a suggestion. However, Mr. Brannan still feels that the focal point of discussion and problem is the specific manner of integrating the two activities and if the work can be done as it is set-up here for TVA there is no reason to believe it could not be done in every State of the Union. The work is not confined exclusively to the TVA. Mr. Dykes informed the group that he thought it was a nicely done job but it contains the same proposals as the report of the Correlating Committee dated June 15, 1945.

Dean Cooper inquired as to whether or not this did not add up to considerably more than the original proposals or any other ideas heretofore expressed. He expressed the idea that this shows up clearly as an attempt to recognize

## SPECIAL ADVISORY COMMITTEE

in a new perspective questions which had arisen from SCS and from the over-all standpoint of the Department of Agriculture.

Mr. Bass asked that he be allowed to clarify a point of attitude concerning TVA by making clear that TVA's advocacy of the method of joint program integration proposed in the documents was limited to the regional program in the Tennessee Valley.

Mr. Brannan asked that the committee consider the following paragraph on page 6 of the Statement:

"Specifically, it is preposed that:

"In the Tennessee Valley at the county level the objectives and responsibilities of the Soil Conservation Service as they involve direct dealings with farmers and farm people be fulfilled by contractual arrangements (comparable to those between TVA and the colleges) providing for the reimbursement of the colleges for expenditures made pursuant to such contracts (direct grants-in-aid to the colleges would be an alternate method of financing this work);"

And inquired as to whether or not this would be considered a direct grant. Mr. Bass responded that grants-in-aid are reimbursements for an expenditure program. The College-TVA proposals contemplate reimbursement for a job done for the carrying out of objectives, and is in a different category.

Mr. Brannan expressed the opinion that grants-in-aid calls for agreement upon the general program but that this statement leaves that pattern in that it describes a program and also goes to Washington to see that it is paid for. In fundamentals, it excludes the contributor of the funds from any direct participation except his funds, collaboration and appraisal. Mr. Brannan inquired as to whether or not the committee agreed that this soil conservation job is of such importance to the national welfare and long range resource planning that it justifies an arm of Government devoting its entire time to that problem. Believed it might be as equally true in Tennessee Valley as in any other part of the country. We are losing land in great quantities. It is something on which the Federal Government and all the people should be concentrating their specific attention. This raises the question of whether you superimpose the SCS on a given state which has so many obligations already that it might have some trouble in giving weight and emphasis to the SCS program. The Extension Service and the Colleges have a big burden. Therefore, believe that on this kind of a job of such great national importance it would be in the public interest and interest of the people to have the direct application of a specific arm of Government working on it. In the final analysis it comes down as to whether we should have two agencies or gear up the one agency financially.

Mr. Schaub replied that he agreed on the importance and necessity of control of erosion by SCS but that you can use the same arguments with any other phase of agriculture. He did not believe that you can disassociate in practice soil erosion and other operations of the farm.



## MINUTES

Mr. Brannan said he thought the two comparisons are separated by degree. He illustrated by saying that no insect or disease has really threatened the basic economy. He does not believe that soil erosion has gone this far but that it is very important that we do not let it do so.

Mr. Schaub raised the question as to whether or not you will accomplish more by combining through one agency or two or more. Mr. Brannan stated that he thought this was a problem that has to be faced but that he also believed you had to have correlation before you got down that far.

Mr. Brannan raised the question as to whether or not the Soil Conservation District type of operation would do the job. Mr. Schaub stated that he did not think it would if they were going to use the soil conservationists as he did not believe the farmers could do the correlating job.

Mr. Dykes brought out that the Districts have done surprising things. There have been a good many spots where they have had some pretty warm sessions but very fruitful between the AAA and SCS people which has led to common adoptions. Of course, they cannot do a one hundred per cent job in coordinating.

Dean Schaub informed the committee that under the general charter a district could have authority to do anything. In answer to this, Mr. Dykes stated that primarily a district is in business to do soil conservation.

Dean Cooper informed the committee that by the submission of these two proposals it was hoped to integrate their activities in a way that would be workable and in a way which would not lessen but increase the work that has already been done.

In response to an inquiry by Mr. Brannan as to whether or not the colleges consider the channeling of the funds directly into the colleges a basic essential, Dean Cooper stated that he was not in a position to answer. However, from comments that had been made by people representing the colleges, they believed that is a matter of considerable importance in the setting up of a workable plan.

Mr. Dykes asked the following question: The SCS has been studying the problem of soil conservation as hard as they can and if someone is prepared to answer him he would like to know how the TVA envisions the conservation program in the Tennessee Valley, how fast and what needs to be done. Believe it might be helpful to know that the conservation problem in the TVA is. Dean Schaub stated that in fifteen counties in North Carolina, general scheme on conservation side is for TVA to furnish phosphate for demonstration; encourage farmers to utilize lime. In addition, they have definitely gone on the idea of moving row crops from the hillsides to the bottom and moving from bottom land (hay) to the slopes. Agronomic advice as to all crops, fertilizer, introduction of alfalfa, legumes, etc. has been offered. From the standpoint of results it has never been measured as well as it should have been.

Continuing Dean Schaub stated that they do have some very specific cases. For example, in one county, they enlisted the support of all the people, made inventory of acreage, kind of homes, kind of implements, etc. Made

## SPECIAL ADVISORY COMMITTEE

another inventory ten years later and results have been phenomenal. There has also been a change of attitude in the people themselves--they know they can produce better crops and they want to raise their standards of living.

In response to an inquiry raised by Mr. Dykes as to how long in these fifteen counties is it going to take at the present rate of progress to get the work done, Dean Schaub replied that they needed increased personnel to work with the people and also need material. When needed materials are received it will solve itself in time. It could also be speeded up by getting more people. Mr. McAmis stated that he had heard some of Dean Schaub's people say it could be done in six or seven years at the present rate. Dean Schaub indicated that out of thirty-five thousand farms in the area they are working with about seven thousand. It was brought out by Mr. McAmis that, of course, none of the farmers have completed their job. Mr. Dykes stated that even if they had not completed their job they had gone a long way by establishing practices and plans for conserving the soil.

Dean Cooper answered Mr. Dykes' question by stating in Kentucky they were one-sixth to one-eighth done. This is based on a grass economy. Believed with three or four men per county they could get the work done better and faster. This represents a community with a good many farms. Have a feeling that as far as Kentucky is concerned, soil conservation is pretty well embedded.

Mr. McAmis said that during the past 12 years some 41,000 farms containing 4,930,000 acres have been developed in the Tennessee Valley as test-demonstrations. These farms have used approximately 93,000 tons of phosphatic ferterlizer in the form of the concentrated materials produced by TVA. Of these farms 31,000 are members of area demonstrations in 650 communities. Outside the Valley and in other States approximately 13,450 test-demonstration farms containing 2,892,000 acres have participated.

Mr. McAmis said he understood Mr. Brannan to suggest that a defect of the College-TVA proposal is its failure to provide for the correlating of Department programs other than that of the Soil Conservation Service. If by that is meant that the proposal does not provide a plan for relating Department programs to each other to assure mutually consistent and unified objectives and procedures, the observation is correct, Mr. McAmis said. It is correct, because that function is deemed to be legislative and administrative and to rest with the Congress and with the Department.

The College-TVA proposal, Mr. McAmis continued, does aim to provide a method and procedure to fit partial or specialized services to farmers in the Tennessee Valley into a single program based on the needs of the whole farm unit; to integrate the work of all interested agencies in the Tennessee Valley so that the individual farmer shall have maximum possible use of all productive factors in the efficient operation of his farm and in support and advancement of his family.

If Mr. Brannan is saying that the proposal fails in these respects, then it fails altogether.

More generally, the Tennessee Valley program, as a whole, aims to provide for the unified development and application of all the resources of the



## MINUTES

Tennessee Valley in the service of all the people; and it aims, at the same time, to provide a basis for all interested agencies of the Department to participate effectively in that process.

Mr. Brannan stated that his feeling had been that as a result of this over-all effort something might evolve which could be agreed upon as being better than the present Memorandum of Understanding. However, he now feels that he has reached the place where he is obligated to make an interim report to the Secretary along the following lines:

The SCS problem has been discussed at length. Two documents representing the views of the respective parties have been presented. The one presented today channels funds through the colleges and without any new personnel (SCS) in the valley. The document we presented calls for SCS personnel in the valley. We have reached a place where we think further discussion on this subject will not be fruitful and believe we should continue with discussions on the other items mentioned in the Secretary's memorandum.

Mr. Brannan also expressed the belief that out of the future discussions it may be possible to find the form in which to solve the SCS problem.

Mr. Dykes agreed with Mr. Brannan that a report should be made to the Secretary as to progress made.

Dean Cooper stated that he thought Mr. Brannan and Mr. Dykes were obligated to make a report to the Secretary. However, he does not want the SCS problem considered an impossible situation but instead believes that it can be worked out.

Discussion was held as to the next topic to be taken under consideration. However, until Dean Cooper advised Mr. Brannan that he has authority to consider any other topic this matter will be held in abeyance.

On this point, after reviewing the pertinent correspondence subsequent to the meeting of the committee, Mr. Bass stated: On the basis of Mr. Clapp's letter of September 9, 1946 to Mr. Brannan, in reference to appointing the TVA conferees, it would appear that the TVA members of the Advisory Committee were designated with the assumption that we were to consider the Soil Conservation Service relationships. At least before proceeding to consider other matters in the Secretary's letter I feel that we should report to the TVA Board on the present status of the committee's negotiations and ask for further instructions.

Discussion was had as to the status of soil conservation districts from now on. Mr. Brannan indicated to the committee that they would remain in the same status as when the discussions were started.

Meeting was adjourned at 2:15 p.m.

## SPECIAL ADVISORY COMMITTEE

LETTER DATED MARCH 25, 1947 FROM DEAN  
THOMAS COOPER, CHAIRMAN, CORRELATING  
COMMITTEE TO PRESIDENT H. L. DONOVAN,  
CHAIRMAN, COMMITTEE OF PRESIDENTS  
TENNESSEE VALLEY

Dear President Donovan:

You will recall the meeting about eight months ago with the Secretary of Agriculture and the circumstances which led to the formation of a Special Advisory Committee to consider and develop a satisfactory relationship with the Soil Conservation Service, U. S. Department of Agriculture, in the Valley.

As it has worked out, the Correlating Committee, namely, Mr. J. C. McAmis, Director of Agricultural Relations in TVA, Mr. James G. Maddox, until recently Special Assistant to the Chief, Bureau of Agricultural Economics, and myself, have always met with the Special Committee. Serving on this latter committee have been Dean Schaub and Director Davis; Mr. Gordon Clapp as General Manager of TVA, now succeeded by Mr. A. S. Jandrey, Assistant General Manager; and Mr. Neil Bass, TVA Chief Conservation Engineer; Mr. Charles F. Brannan, Assistant Secretary of Agriculture; and Mr. J. C. Dykes, Assistant Chief of Soil Conservation Service. Initially, the college presidents and TVA members had the impression that the joint Memorandum of Understanding was under question. Later, Secretary Anderson made it clear that the Memorandum as a basis for agricultural correlation was not questioned but that it was a matter of correlation between the Soil Conservation Service and the land-grant colleges in the regional framework.

The Committee has worked earnestly in an attempt to reach a mutually acceptable solution. At the most recent meeting in Washington on February 22, the colleges' proposal to integrate Soil Conservation Service operations into the joint program in the Tennessee Valley on the basis of a proposed contract to be executed with the Extension Services of the various states was balanced against a proposal put forward by the Department last September, a copy of which was sent you. The Department's proposal provided that the SCS extend its operations to the Valley on essentially the same footing as elsewhere in the nation. Nothing suggested at the Washington meeting seemed to offer common ground for agreement.

The Department's representatives thereupon proposed that they report to the Secretary that the Committee had been unable so far to reach an agreement and that they recommend to the Secretary, (1) that Soil Conservation Service activities as they affect the Valley region be held for the time being in status quo; and (2) that the Special Advisory Committee, while holding in abeyance further active consideration of the SCS matter, turn its attention to other problems of agricultural coordination, such as those suggested by the Secretary last March 28 in a letter to the Correlating Committee, with which you are familiar.

These suggestions raised serious questions in the minds of the college representatives. It was our recollection that the function of the Special Advisory Committee was specifically to consider a solution to Soil Conservation Service activities in the Valley. It was not the purpose of



## COOPER-DONOVAN LETTER

the presidents to authorize activities other than the solution of the Soil Conservation question which was raised in their statement to Secretary Anderson. To hold the present situation unchanged is not a solution. Furthermore, it seemed that the solution of other problems would not furnish a usable guide to solution of the SCS problem. I wish to raise the question, therefore, whether in your opinion the time has come for the college presidents to meet again with the TVA Board and determine upon further action in the matter.

Sincerely yours,

/s/ Thomas Cooper  
Chairman  
Tennessee Valley Agricultural  
Correlating Committee

REPORT OF COMMITTEE ON COOPERATIVES 1/  
by  
L. I. Jones, Chairman

The Committee on Cooperatives held its regular meeting in Decatur, Alabama, on February 27, 1947. The Committee had extended invitations to the newly elected representatives of the cooperatives in the seven States. These farmer members of the cooperatives were requested to serve as an Advisory Council to our Committee. The following five members of the Advisory Council were present:

R. H. Bandy, Ringgold, Georgia, representing Georgia Mountain Growers, Incorporated  
Charles W. Davis, Brevard, North Carolina, representing Farmers Federation Cooperative  
E. P. Garrett, Decatur, Alabama, representing Tennessee Valley Fertilizer Cooperative  
L. E. Skinner, Iuka, Mississippi, representing three county cooperatives in the Valley area of Mississippi  
William G. Smith, Lebanon, Virginia, representing the Southwest Virginia Cooperative

The two following members of the Council were not present:

Howard Hornsby, Peakland, Tennessee, representing Tennessee Farmers Cooperative  
Fred Maddox, Mayfield, Kentucky, representing Valley Counties of Kentucky Cooperative

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1/ See text, p. 13.

## COMMITTEE ON RESEARCH

After extending a cordial welcome to the members of the Advisory Council, the Committee outlined the functions which it hoped the Advisory Council would perform.

1. To counsel and advise with the Committee on Cooperatives with respect to problems of cooperatives in the Tennessee Valley Region.
2. To assist the Committee in developing solutions for such problems.

The Advisory Council selected as its chairman Charles W. Davis of Brevard, North Carolina, and in the course of the meeting its members offered some very constructive suggestions to our Committee. The Committee anticipates that the advice and counsel of this group will prove to be very valuable and that the relationship will be mutually advantageous to the cooperatives and to agencies and institutions represented in the Valley-States Conference.

At its meeting in Biloxi, Mississippi, in October 1946, the Committee instructed its Correlator to revise and bring up to date the report on "Programs of the Land-Grant Colleges relating to Cooperatives in the Tennessee Valley." Subsequent to this instruction it was learned that the American Institute of Cooperation was planning to make a similar survey of all land-grant colleges in the United States. A conference was held between the Correlator and a representative of the Institute and it was agreed that the Institute would include the land-grant colleges of the Valley States in its survey, supplying the Correlator with information pertaining to the Valley States. The Results of the survey have been made available to the Correlator and the report is being revised on the basis of the recent data supplied. After the revision has been completed, the report will be presented to the Conference.

REPORT OF COMMITTEE ON RESEARCH 1/  
by  
L. D. Bayer, Chairman

The Committee on Research consisting of Director M. J. Funchess, Director H. P. Stuckey, and the Chairman, assisted by Dr. Randall J. Jones, Correlator for the Committee, and Assistant Director R. W. Cummings, met in New Orleans on March 10, 1947 and prepared the following report.

Publication of Reports

The Committee unanimously agreed to amend the recommendation of the Biloxi meeting which stated that the various committees should prepare a series of numbered reports for their particular committee in favor of the setting up of one set of reports emanating from the Valley-States Conference. In line with this recommendation, our committee suggests that the proposed publication on Sources of Phosphate be published in multilithed form as Valley-States Conference Report No. 1.

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1/ See text, p. 14.



## PUBLICATIONS

In line with this recommendation, it is suggested that a report of the results on fused phosphates including certain engineering and animal feeding phases be published as Valley-States Conference Report No. 2.

This recommendation would mean that in the organization someone would have to be given responsibility for setting up the numbering of these reports and clearing them. Otherwise the Research Committee would have its No. 1 report and perhaps come out with another report without knowing whether it was report No. 2, 3, 5, or 6.

Analysis of Phosphate Data in the Southeastern Region

The Committee has asked the coordinator to summarize and analyze the phosphate data from the various Experiment Stations in the Southeastern area as a basis for projecting further phosphate research. To this end, Dr. Howard Rogers, who has recently been employed by the TVA, will be working on this large undertaking. We request that all of the Experiment Station Directors of the area make available to Dr. Rogers any unpublished data that they may have in their files so that we may have a complete report. All such data will be published only with the proper recognition to the respective institution.

Phosphate Fixation

The special phosphate fixation committee which was set up for the purpose of organizing research on phosphate fixation in the Southwestern area met at the Omaha meeting of the American Society of Agronomy and at the Biloxi meetings of the Southern Agricultural Workers. At Biloxi they met with Messrs. Elmore, Walthall, and McAmis, of the TVA. No formal project was developed although it was agreed that the various research workers would exchange project outlines and project reports of their phosphate fixation work so as to give each one an idea of what the other was doing. This may lead to a development of a regional project later on. This committee suggests that the phosphate fixation committee meet at the Shoals at some date in the future with the members of the Engineering Laboratory and others so that they could become better acquainted and so that the State folks would know of the facilities at the Engineering Laboratory.

Radio Isotopes

At the present time, the North Carolina Station is working in conjunction with the USDA and Cornell on radioactive phosphorus. The Georgia Station has exhibited interest in one of the nitrogen isotopes. Our Committee recommends that we attempt to establish working relations with the Oak Ridge Institute and acquaint them with the research organization in the Experiment Stations of the area. We would also want to find out from them what facilities of the Institute would be available to the Stations. After finding this out, we would want to emphasize with the State Stations the possibilities of radio isotope research and particularly with respect to the use of the Institute to train personnel.

Our Committee will take the responsibility of contacting the Oak Ridge institutions.

## COMMITTEE ON RESEARCH

Engineering Projects on Pasture Fertilization

The projects proposed by the engineers for equipment for applying fertilizers to pastures has been approved. The Committee particularly emphasizes the need for making sure that the following factors are taken into consideration in the carrying out of these projects.

- a. Make sure that there is a close tie-up between the agronomists and engineers in planning, carrying out and analyzing the results of the work.
- b. Make sure that there is adequate plot randomization and good experimental design in all experiments.
- c. Make sure that the experiments are on representative soils, realizing that they must be adjusted to the local situation.
- d. Make sure that adequate rainfall records are obtained at each location.

It is suggested that at least two locations be selected in which there would be a considerable difference in the phosphorus level of the soil. We feel the project has many possibilities, if it can be carried out in a well-organized manner.

Comments on the Name and Function of the So-Called Research Committee

The experiences of the so-called Research Committee of the Valley-States Conference during the past several years have led the members of the Committee to raise serious questions concerning the logic behind the setting up of the various committees of the Conference. The Research Committee was one of the first organized. It grew out of the need faced by the Experiment Station Directors for having some effective coordination between the TVA and the states with respect to research problems.

In the meantime, several other committees have been set up that also have research responsibilities. There is no obvious coordination of the work between the various committees. As a result of certain delineations of fields of work that have come from certain members of the Correlating Committee, the Committee on Research is supposed to confine its work to the so-called "natural sciences", leaving other research fields to other committees. We do not believe this differentiation is either logical or desirable. This does not follow the pattern of organization of research in the Experiment Stations. The Experiment Station Directors who are members of the Committee on Research do not feel that the logic in setting up the various committees has helped the Directors much in a coordinated research program. Even now we find research in land classification classified entirely as a "social science." In other words, it appears that committees have been set up which have resulted in deCOORDINATING research rather than in coordinating it.

In order to effectuate a more orderly and efficient coordination of research, the Committee on Research has two alternative recommendations



## COMMITTEE FUNCTIONS

to make. The Committee in making these recommendations is only interested in the overall betterment of the entire research program and not in giving the Committee more to do.

Alternative 1

We recommend that the Committee on Research be truly such a committee that will correlate all research programs with the Stations in line with the present administrative responsibilities of every Experiment Station Director. We further recommend that this Committee include an administrator of research from each of the Valley States. Its function will be to approve the research program of the Valley States that is carried out in cooperation with the TVA. Furthermore, it is recommended that no projects be initiated until the Committee has had opportunity to review them. It is our opinion that this will be the only manner in which true coordination can be achieved.

Alternative 2

We recommend that the name of the Committee on Research be changed to the Committee on Biological and Physical Research and that the fields of research under its allocation of functions include soils, plants, animals, related engineering problems as well as land use and classification.

This would permit some semblance of coordination of research in fields that are closely interrelated. The personnel of this Committee should consist of five administrators of research plus the coordinator. Provision for rotating the state members of the Committee between the seven Valley States should be made. A five-year term for each member is recommended, with the term of office so staggered that one new man is selected each year.

REPORT OF COMMITTEE ON RESOURCE UTILIZATION 1/  
by  
Frank S. Chance, Chairman

A JOINT COORDINATED FARM STRUCTURES AND  
FARM HOUSING ACTIVITY FOR THE TENNESSEE VALLEY

RECOMMENDATIONS BY THE COMMITTEE ON  
RESOURCE UTILIZATION OF THE VALLEY STATES CONFERENCE

Introduction

This proposal had its origin in certain discussions between the former National Housing Expediter and the former General Manager of TVA. As a result of their discussions of the then pending Wagner-Ellender-Taff Bill and the rural housing problem in the South, it was agreed that steps should be taken to develop a joint activity in the field of farm housing.

On May 28 and 29, representatives of the Valley land-grant colleges, TVA, USDA, and NHA met in Knoxville. After its deliberations, the group took the following action:

"That it is the sense of this meeting that the Tennessee Valley Agricultural Correlating Committee be requested to prepare, with the advice and assistance of the National Housing Agency, and to submit to its constituent agencies and institutions and the NHA, with recommendations, a proposal for a cooperative project for the solution of the farm housing problem in the Tennessee Valley, and as a demonstration of method of attacking the national farm housing problem."

The Committee on Resource Utilization was asked to take leadership in developing this proposal. This Committee sponsored a meeting of a technical group October 23 and 24, at the University Farm, Knoxville, Tennessee. The group included agricultural engineers and home economists from the Valley land-grant colleges, plus administrative representatives of TVA, NHA, and USDA. This technical committee reported to the Resource Utilization Committee at its meeting on January 7, 1947.

Legislation

When this problem was first discussed early in 1946, the pending Wagner-Ellender-Taft Bill served as a focal point inasmuch as the Bill provided for substantial appropriations for work in the field of farm housing. This Bill was not passed by the last Congress but the Research and Marketing Act of 1946 was passed. This legislation has been interpreted to cover research on farm housing and other farm structures problems. It offers great possibilities for work now badly needed.

Farm Structures Problem

Although the early interest was restricted to farm housing, it was decided that any activity in the field of farm housing should be carried on within

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1/ See text, p.22 .



## FARM HOUSING AND STRUCTURES

the over-all framework of a farm structures program for the following reasons:

1. In the land-grant colleges, the agricultural engineers, who are concerned with farm housing, are also concerned with other farm structures problems.
2. The Bureau of Plant Industry, Soils and Agricultural Engineering of the USDA is concerned with both housing and other farm structures.
3. The farm house and the service structures are parts of the total farm unit, and for the farmer his home and his other buildings involve similar problems of engineering and economics.

### Emergency and Long-Time Aspects

The nature of the farm housing problem has changed during the past year. A year ago there was considerable interest in the emergency aspects of the problem. This interest has been largely dissipated but there remains the long-time need for important changes in farm housing. The Committee recognizes three tools for dealing with the problem. These are research, education, and service activities.

### Research

One of the most critical needs now is for fundamental research into basic housing factors. This type of research requires unusual vision and imaginativeness on the part of researchers plus an unusually high degree of competence. Also the Committee recognizes that research needs in farm housing are not restricted to engineering or architectural aspects of the problem. Certain economic and social investigations are badly needed as well.

### Education

The Valley States colleges are now carrying on some extension work in rural housing. This is usually divided between the agricultural engineers and the home economists. Both groups have said they have not been able to apply energies to the problem in proportion to the size of the job. They also say that there are a number of aspects of the farm housing problem where they have an inadequate base of facts for educational activities. One of the most important of these is the attitudes of farm people; an almost unexplored field in connection with housing. They have pointed also to the competition for the time of county agents. Most agents are already overburdened with work without devoting much if any time to housing.

### Service

One of the most important service activities now under way is the Regional Plan Exchange Service, in which the land-grant colleges have pooled their

## COMMITTEE ON RESOURCE UTILIZATION

plans for farm buildings of all kinds, and, with the aid of the USDA, produced a regional catalogue. This Plan Service is recognized as a considerable improvement over the previous unrelated state facilities, yet there is room for further improvement. Many farm people are apparently unaware that the Plan Service exists, and there is some reason to believe that the plans for farm homes that have been developed so far do not adequately represent the desires of some groups of farm people.

Joint Program Required

This Committee recognizes that an effective attack on the farm housing problem will require the co-ordinated efforts of the state colleges and of the several Federal agencies interested in farm housing. No one institution nor one agency can do the job alone. Furthermore, if these institutions and agencies work together, there will be more progress than can be achieved through an unrelated effort, and more efficiency in the expenditure of public funds.

Recommendations of CommitteeResearch

- A. Surveys of attitudes. Careful scientific surveys are needed to indicate:
  1. Desires for housing improvement. What does "good housing" mean to farm families? What differences in concept exist in different economic groups? What are the differences in ideas of men and women? What are factors influencing desires for improved housing?
  2. Characteristics of housing preferred by rural families. Are differences between preferences and technicians' recommendations the result of ignorance, or more fundamental factors? Do preferences suggest lines of fruitful research?
  3. Intentions to build or remodel. Such a survey should include a quantitative evaluation of the backlog of potential rural construction, the nature of proposed construction, and a description of materials and designs proposed. Information should be collected on factors influencing the selection of materials, design, sites, building size, etc.
- B. Ability to finance housing. Sample surveys of farms should be made to measure economic status, debt conditions, income productive capacities and housing needs of families as related to farm's ability to provide. There is need for a classification of farms according to ability to support good housing. One aspect of such research might well include budget analysis of "problem" farms to determine extent to which improved management would permit better housing. The unit test-demonstration farms should be a source of significant data.



## FARM HOUSING AND STRUCTURES

C. Architectural and engineering studies.

1. Delineation. Many rural builders cannot read complex blue prints. There is need for experiments in graphic arts in order to develop improved means of presentation of farm structures plans.
  2. Functional farm house design for rural living. The research would include studies of space requirements, work simplifications, living requirements, and storage needs, and the integration of these factors into acceptable house designs.
  3. Prefabrication. The research might include studies of local prefabrication of native materials, and the development of standardized members and units for farm buildings.
  4. Heating and Ventilation. There is need for research on such topics as (1) electric heat in farm buildings, and (2) cooling systems for southern farm homes.
  5. Demountable houses. It appears that demountables may be useful in public housing programs in marginal areas, for tenants, and in other instances where it is desirable for title to a building to be separate from title to the land on which it rests.
- D. Possibilities of group action in rural housing. The area test-demonstrations offer possibilities for experimental operation of a community shop and mill, including a local prefabrication facility, experiments in joint purchase of materials, construction, and joint use of architectural aid, etc.

Education

- A. Assistant county agents. The Committee recommends as an experiment in educational methods, that assistant county agents be employed in a few sample areas of the Tennessee valley to give special attention to farm structures. Among the activities of these special agents would be:
1. Housing programs. Development of community housing programs.
  2. Technical advice. Providing technical advice on problems of construction and remodeling.
  3. Educational program. Carrying on a general educational program on farm structures, particularly farm housing.
  4. Collaboration. Collaborating in any experimental housing activity which the college or the joint regional research group (discussed below) may wish to carry on in that county.
- B. Publications. The Committee recommends careful study of the experience of the colleges in the north central states in joint preparation and distribution of state publications on farm housing and the development of appropriate arrangements for handling joint publications for the Valley.

## COMMITTEE ON RESOURCE UTILIZATION

- C. Training. Outstanding experts in farm housing could be brought to the region to participate in forums and workshops for extension field personnel. Among these could be personnel of the National Housing Agency.
- D. Service activities. This Committee recommends that the Regional Plan Service Committee expedite its efforts to improve the Plan Service and to make more farm families aware that such a service is available. It is also recommended that the proposed regional research group devote some of its time to contributions to the plan service in terms of studies in delineation, design and surveys of reactions of farm people to plans now included in the plan service catalogue.

Joint Regional Research Group

The Committee recommends that the USDA, NHA, and the TVA consider establishing a small joint staff to locate in the Tennessee Valley and to carry on research in farm housing. There are certain types of needed investigations which are regional in scope and which do not lend themselves to division among several research staffs but rather should be carried on by one closely-knit staff. The device of a joint regional research group appears to offer important advantages in this respect. Such a staff, although small, could provide maximum opportunity for important work by personnel of unusual ability. Furthermore, the joint staff could operate with marked efficiency in housing research.

The objectives of federal and regional agencies could be best implemented by such a staff with members administratively responsible to their own agencies, but collectively engaged in work upon common problems. The Committee believes that public funds would be more effectively spent on certain types of investigations through such a regional group than if divided among several agencies and institutions and spent on unrelated projects.

The land-grant colleges of the Tennessee Valley area, the USDA and the TVA have more than ten years' experience in working together on a regional program, and in the Valley-states Conference and the Correlating Committee, they already have devices for developing and carrying on joint regional activities. A joint regional research group on farm housing appears to fit the framework that is already established.

In carrying on the soil survey of the Tennessee Valley, the BPIS and AE and the TVA have developed effective and harmonious working relationships. This experience sets a pattern for effective cooperation in a joint regional research group on farm housing by these same agencies in cooperation with NHA.

This Joint Research Group also offers excellent possibilities for making effective use of the funds provided by the Agricultural Research and Marketing Act of 1946 as follows:

USDA bureau might set up projects under the Act to be carried on by USDA personnel assigned to the joint housing research group. The USDA



participation in the joint group might take the form of a Southern Regional Housing Laboratory.

TVA might make contributions of personnel, space, equipment and/or funds to the research group for work related to TVA responsibilities; and in addition on lines where it could contribute special competence, might contract with the USDA to carry on specified research under the Hope-Flannagan Law for the USDA. Studies in delineation as outlined under "Architectural and engineering studies" might be in this category.

In addition, regional projects sponsored by two or more of the Valley land-grant colleges might be integrated with the projects of the joint research group. Thus, all research on farm housing in the region would be knitted together in one comprehensive activity.

✓ TVA-STATE RELATIONS 1/

by

H. N. Young

Director, Agricultural Experiment Station  
Virginia Polytechnic Institute, Blacksburg

Chairman Cooper (introducing Director Young)

Gentlemen, we have as our guest today one who is an old friend and, using the time-honored phrase, he doesn't need an introduction, but I will introduce him anyway.

Dr. Young has carried on his work in the field of economics in Virginia, and very successfully. He is one whom men admire and look upon as a thinker, as well as a good teacher. Those qualifications sometimes don't go together. I was tempted to tell you a story which he repeated to me regarding a certain college which invited him to speak. But I'll refrain and he may tell it to you himself.

Dr. Young we are glad to have you with us and we look forward to your presentation. I am pleased to present Dr. H. N. Young of the Virginia Station.

Director Young

Dean Cooper and gentlemen, I am a little inclined to be somewhat offended with that introduction. There is one thing that you left out. I was once a candidate for the Presidency of the United States.

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1/ Address delivered at the luncheon session of the Valley-States Conference, Abingdon, Virginia, Wednesday, April 2, 1947. See text, p. 25.

## TVA-STATE RELATIONS

I was 3 years old at the time. I was nominated to the office by my grandmother who was once a friend of Silas Wright. My grandmother often said that Silas Wright could have been President but he did not choose to run.

When I was 4 years old I went out to the chicken house one day to look for eggs. I picked up an egg, looked at it and wondered what might happen if I threw it against the windowpane. I did - the window as well as the egg broke. After using up all the eggs and most of the windowpanes I went back into the house. When my grandmother learned what I had done, she said, "You will never be President if you do things like that. Silas Wright would never have done that." My father went into action in a different way. I stopped throwing eggs. Very soon, however, I did something else equally as bad. My grandmother reminded me that "Silas Wright would never have done a thing like that". And so it went on from one thing to another. As soon as I assumed one of his virtues, Silas Wright would take on others. By the time I had reached the age of 6, I discovered that it was useless to try to compete with a dead man. I was not responsible for being a candidate for the Presidency. Neither am I to blame for being on this program. When I get through you may feel like shooting someone. I would suggest that you take aim at Tom Hutcheson. He got you into this.

The subject of my talk is "TVA-State Relations". In reality I know little about this subject; so I am going to discuss it in somewhat philosophical terms.

In order that we may think intelligently of our relationships, it seems to me that we need to take an historical point of view. Starting back about the time of Columbus up until the American Revolution the western world operated through an economic and political system called mercantilism. This period was characterized by four things of fundamental importance.

1. The feudal system broke down almost completely.
2. Out of the breakdown of the feudal system the absolute state emerged.
3. The development of the absolute state extended to the economic field and took the form of centralized economic planning. The natural outcome of this was that
4. Governments attempted to control the economic activities of man for the purpose of increasing the wealth of nations.

Adam Smith and others pointed out what they believed to be the fallacy of this doctrine. The economic system called laissez-faire emerged.

The American Revolution was fought to rid our country of (a) economic collectivism and (b) enforced conformity to an average.

The birth of the American Republic took place after two or three centuries of extreme governmental control of the activities of man. The authors of



the American Constitution had lived through a part of this period and had been given the opportunity of observing the operation of planned economy at first hand. It is not surprising, therefore, that we should have set up a federated system of government, one which provided for centralized control of a few general things but for local operation and control of a majority of the internal affairs of the nation. It was thought apparently that such a government would make it forever impossible to set up a centralized system of planned economy such as had existed in France in the reign of Louis XIV.

There are two important fundamentals of the federated system of government which our forefathers set up:

1. They established local responsibility and control of those affairs which it was thought could be handled best by local action. Our forefathers believed very strongly that the majority of most human activities could be handled most effectively by local people themselves.
2. The constitution reserved to the federal government certain things which it was thought could not be done effectively by local people, such as the coining of money, the operation of the post office, the waging of war, etc. During that period a premium was placed upon local authority and responsibility. These two grew up together at the local level. Centralization was not thought necessary for most activities because there was little or no desire to exercise power. We have little or no need for centralized control where we do not wish to exercise power.

This movement which started even before the time of the American Revolution was labeled at the time as liberalism. In the middle of the 1930's some of our contemporaries called this same doctrine reactionary. Thomas Jefferson is said to have made the remark that "We need a revolution now and then". I can't ever bring myself to think that he would want to return to the condition out of which our forefathers fought, or that he would ever think that the centralized control of economic activities of men could be called liberal.

Largely as the result of our policy of the 18th and 19th century liberalism the United States made the most rapid progress in conquering the wilderness and developing our natural resources that history shows any example of. Some believe that we did a bad job. In many respects we did; but China did even worse. I doubt that it is the fault of the system. I don't think the reason was that we left the control of local affairs to the state rather than to the federal government. At this point I would like to ask some questions. You may remember that in about 1837 we started on a severe economic depression. What do you think would have happened to Kansas if the central government had established acreage control on wheat? If at that time Virginia or the federal government had instituted a series of tobacco quotas? If at that time we had put quotas on cotton acreage what would Texas be doing now? I don't know. I am just raising these questions. They deserve our serious thought.

In many respects the relationships existing between the TVA at present and the various states in the Tennessee Valley is not much different than the

## TVA-STATE RELATIONS

relationships of the federal government to the various states. There are differences between states in the Valley---climatic differences, topographic differences, economic differences, all of which cause variations in the way we do things. That principle is fully recognized in the Tennessee Valley. I hope we continue to recognize it and I trust that the TVA program will continue to be channeled through the states as it is now and that the central organization will continue to delegate to the states the responsibility of developing programs in each simultaneously -- programs which will recognize local differences. The TVA has said to us "This is your program, not ours". That I think is the way to get the job done. It will be done better and more effectively. Authority and responsibility are largely on a local level, and I hope this condition will continue.

For the remainder of my discussion I wish to consider a few other matters which concern all of us and which I believe to be fundamental.

1. Land-grant colleges are educational institutions and they are supported by public taxation. They are under obligation to the public as a whole. We have just as much obligation to the people who consume milk for example, as to those who produce it. It is our job to help farmers increase their efficiency in producing milk. It is equally as important that we help them deliver a wholesome and helpful product on the consumer's door step.
2. The function of research and education is to discover and to teach the truth, and to report the results of research honestly and without propaganda. I think we have an obligation to the public to do exactly that.
3. Because the function of a land-grant college is research and education these institutions have no right -- moral or otherwise, to be the propagandist for any program or the promoter of any cause.
4. If any person or group is ever successful in causing bias in the results of our research or in influencing our land-grant colleges to report one side of an issue while withholding the other, we shall forfeit our right to be classed as a public institution. Under such a circumstance what right would we have to demand continued public support? And what is perhaps even more important, where would the people look when they want unbiased answers? I have said many times during the past few years that there must be in every state one or more institutions where all the people can go and be sure that they are getting the unbiased truth. We may not always have the right answer, but as far as our ability is concerned, it should be our best.

There are some who think that we should promote the expansion of a certain method of doing business. I should like to remind you that there are four agencies which do the world's business. These agencies are the government, the business corporations, the cooperative corporation or association, and the individual. All these agencies of doing business are legalized by our constitution. Three of them pay the taxes from which we draw our public support. Does it seem wise or even ethical that we should use the taxes which we collect from two of these agencies to promote the third, and to set it up in competition



H. N. YOUNG

with the other two? It is true that we have an obligation to our students and to our farmers to furnish instruction in the principles of successful business management as related to cooperative organizations. We are under obligation as teachers to be objective in our approach. We should point out the advantages and disadvantages of each way of doing business, but our teaching should be based on a careful, objective analysis of the facts rather than upon our hopes, our aspirations and our prejudices. An educational institution is no place for reformers and crusaders. We need light rather than heat.

5. State institutions which accept funds from the TVA are under obligation to set up their research and educational programs in such a way that they will yield valid results. Funds which can not be used effectively should not be requested.

FEDERAL-STATE RELATIONSHIPS  
IN  
THE TENNESSEE VALLEY 1/  
by

I. O. Schaub  
Director, Agricultural Extension Service, North  
Carolina State College of Agriculture and  
Engineering, Raleigh

P. P. Picklesinner, of Shortoff, is classified by his neighbors and friends as a good farmer. He is recognized as a leader in his community and, over many years has been a good student of agricultural literature and has sought information and guidance from Federal, State, and local agencies, working in the field of agriculture.

Mr. Picklesinner gave much thought to his farm program and made it a rule to plan his weekly operations on the farm so as to best utilize his time and to take advantage of the weather and seasonal conditions. During the latter part of the vicious economic depression in the midthirties, Mr. Picklesinner had a very definite schedule of farm activities for each week and was out bright and early Monday morning preparing his ground for planting corn. He had been busy some two hours and was making good headway when a car stopped near the field in which he was working and a man, whom he immediately identified as the county agent, came over to where Mr. Picklesinner had stopped his team. He had received much help from the county agent and was always delighted to have him visit, even when he was quite busy. For some time Mr. Picklesinner and the agent had been developing a farm plan to include more pasture and the production of forage crops to adequately take care of his livestock needs. The county agent had sent soil samples to the experiment station for analysis and had just received the report and recommendations regarding liming particularly and as to the fertilizers to apply. In all, 60 minutes were consumed in the discussion

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1/ Statement made at the Twenty-Seventh Valley-States Conference, Abingdon, Virginia, Wednesday April 2, 1947. See text, p.25 .

## FEDERAL-STATE RELATIONSHIPS

of recommendations and, while no written agreement was drawn or signed, as a result of the visit a fairly definite farm plan was developed and agreed upon.

The county agent got into his car and drove on down the road while Mr. Picklesinner resumed his farming operations. A few minutes later, another car stopped and a man representing an agency created to help low-income farmers walked out into Mr. Picklesinner's field. He advised that one of the tenants on Mr. Picklesinner's farm had applied for a rehabilitation loan and that it was necessary to have a farm plan and for the landlord to sign his approval. Considerable time was consumed in the discussion of these details, but Mr. Picklesinner, being interested in the welfare of his tenant and also being public spirited, did not begrudge the time necessary. He did recognize, however, that the plan agreed upon for the operation of the land worked by the tenant did necessitate some adjustment in the plan agreed upon with the county agent. However, he felt that this could be adjusted and when the visitor left Mr. Picklesinner realized that it was time to take out for dinner.

He shortened his dinner hour as much as possible and hurried back to the field. He was just a little irritated when he noticed a car stop on the highway and one of his neighbors, whom he recognized as being a AAA committeeman, walked over in the field. The committeeman had some printed forms and mimeograph material, and stated that it was necessary to complete the farm plan covering conservation practices that Mr. Picklesinner would follow on his farm during the coming year. It required considerable time to complete the discussion but finally a plan was agreed upon and the committeeman left with the necessary signature of Mr. Picklesinner, but with the sun at a lower angle to the west. Mr. Picklesinner moved just a little faster with the thought of making up some of the time he had lost from his operations and had made two or three rounds of the field when he noticed another car stop on the highway and a man, identifying himself as representing the Soil Conservation Service of the U. S. Department of Agriculture, presented himself. The man from the Service explained that soil erosion was wasting the wealth of the land and that the Department of Agriculture would like to undertake the development of some demonstration on Mr. Picklesinner's farm to show that erosion could be prevented and the fertility of the land improved. This would involve the laying off and construction of terraces, the development of strip cropping, the building of concrete and other types of dams to prevent gullying. Mr. Picklesinner, being a rather large farmer, soon realized that this would involve lots of time, expense and he raised the question of cost. He was informed, however, that the Government would take care of the cost and, in addition to furnishing technical assistance, would also furnish necessary materials including seeds for planting on meadow strips and trees for the planting of a certain piece of land that was badly eroded. It was necessary for Mr. Picklesinner to agree upon the plan of work, the primary purpose of which was to control erosion, and, so much being offered, Mr. Picklesinner, recognizing the need of this kind of work on his farm, finally signed the plans and his fourth visitor for the day went on his way. At that time, it was nearly night and Mr. Picklesinner found that he had only accomplished about 50 percent as much work as he had planned for that day. He appreciated all the help that Federal and State governments were offering him, but as he moved on to the house, he



could not help but feel that he had spent a lot of time with representatives of four separate agencies, all working in a closely related field.

The previous description is, of course, a synthetic case, but we do have instances of as many as four separate agencies calling on the same farmer in one day and, likewise, we have instances of as many as four separate farm plans prepared on the same farm.

In 1914, the Congress passed the Smith-Lever Act. Subsequent acts have been passed for the purpose of further expansion, but all have carried forward the basic principles as outlined in the original Act of 1914. In Section 1 of the Smith-Lever Act, the purpose is stated as follows: "That in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and to encourage the application of same, there may be inaugurated in connection with the college or colleges of each state -- agricultural Extension work, which shall be carried on in cooperation with the United States Department of Agriculture." Section 2 of the Act defines Agricultural Extension as follows: "That Cooperative Agricultural Extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects by field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this Act."

Following the passage of the Smith-Lever Act, the Secretary of Agriculture, representing the Department of Agriculture, and the Presidents of the several colleges entered into a general memorandum of understanding for the purpose of serving as a basis by which all Extension work of the agricultural colleges and the Department of Agriculture might be conducted cooperatively. Under this memorandum, the colleges agreed to "cooperate with the United States Department of Agriculture in all Extension in agriculture and home economics which said Department is or shall be authorized by Congress to conduct in the State of \_\_\_\_\_." The U. S. Department of Agriculture agreed "to conduct in cooperation with \_\_\_\_\_ College all demonstration and other forms of Extension work in agriculture and home economics which the Department is authorized by Congress to conduct in the State of \_\_\_\_\_."

This memorandum appears to have served as an instrument of coordination and to prevent duplication and overlapping until 1933 and subsequent years when a number of agencies were created either by act of Congress or by executive order, working in the field of agriculture and extending down to individual farms. In some instances, the development of activities on the State and county levels were handled through the State Extension Service. In others these developments were made direct with practically no contact with the land-grant colleges. In the case of the Agricultural Adjustment Administration, the administrative and promotional activity in most States were handled by the Extension Service. After a few years, however, pressure was brought to bear to separate the Extension Services from the administration of the program and, in the course of time, separation became complete with only casual contact with requests to the

## FEDERAL-STATE RELATIONSHIPS

Extension Services and the Experiment Stations for technical advice which was sometimes accepted and, in other instances, rejected.

Such is the situation.

Inevitably, it has brought about more or less overlapping, confusion in the minds of farmers, and, to a considerable degree jealousy between the several agencies. Naturally, the question was raised as to whether the procedure followed was not a violation of the memorandum of understanding of 1914. I am not sure as to whether the matter was formally presented to the head policy makers but certainly the question was raised in the field with rather interesting reaction. In the beginning, the main explanation was that these agencies were action programs involving the handling of large sums of money, grants in aid of funds, materials, and services, and since Agricultural Extension was created as an educational agency the memorandum of understanding did not apply. It was further argued that Congress had charged the Secretary with definite responsibilities and that it was imperative, therefore, that he have direct administrative channels from his office down to the individual farm.

Over the years, however, many activities classified under action programs were modified or withdrawn and the work of many of the employees on a county level moved over more and more into the field of education. Under these circumstances, the claim of action programs no longer served as a satisfactory explanation of why the work was not conducted under the general memorandum of understanding. Other reasons had to be offered, some of which may be listed.

It is now argued that soil conservation is of such great importance to the nation as a whole that the Federal Government is justified in setting up a special agency for that purpose and to control the activities direct from the Department to the individual farms.

Another explanation or excuse is that the land-grant colleges through a period of twenty years have failed to adequately take care of the situation.

Still another excuse, expressed privately and publicly, was that Extension people worked only with the larger farmers and that small farmers and low-income producers needed just as much help as the large ones. It is rather paradoxical that many of those making these charges against Extension workers assiduously and perseveringly cultivated the favor of the leading farmers, such as Mr. Picklesinner, mentioned in the beginning.

I do not believe anyone can truthfully argue that there isn't overlapping and confusion in the minds of farmers and public officials. I doubt very much whether anyone would argue that in the light of experience during the last 15 years they would recommend, if starting over, the creation of so many Federal and State agencies to work in parallel lines, but all focusing on the individual farm and home.

Agencies are human to the extent that the people employed are human. It is perfectly natural, therefore, that each agency should strive to



## I. O. SCHAUB

perpetuate itself, to argue in defence of its activities, to see faults and shortcomings in competitive agencies and unfortunately, or should I say fortunately, express these opinions to the general public.

However unfortunate it may be that we have jealousy, competition, confusion, charges, and countercharges between agencies, these matters are of minor importance as compared with the fundamental principle. Fundamentally, the question is: Shall our agricultural policy, in a broad way and in detail, be determined by the Federal Government or shall it be handled in cooperation with State and county governments, and ultimately, the individual farmer? For a number of years, the trend has been decidedly toward direct control from the Federal agencies. The various laws passed by Congress have contained provisions looking toward local determination of policies and administration of activities. Committeemen and other employees are elected by a vote of the people. In many instances, these are supposed to determine the policies and to administer the various provisions of the act of Congress, as well as interpretations of regulations and administrative orders. Gradually, however, as the months and years go by, many of these committeemen unconsciously move over into the field of regular employees and work under orders or rulings emanating from the Federal level. He is told from time to time as to what he can or cannot do; and there are plenty of instances where justifiable reasons were found to remove a committeeman when he became too obstreperous or declined to carry out the orders given him. Unfortunately, and unconsciously on the part of the individual, a few days of employment per year or a few dollars paid for a practice or a free grant in aid in the form of service or materials will influence the thinking of many of our educated and uneducated people. It is my belief that the principle is dangerous either from the Federal or from the State level, and if continued a sufficient length of time, it will bring about regimentation, regulation and a lack of opportunity of freedom of action on the part of the individual.

I am a firm believer in a policy of the Federal government working through State channels on a State level and through and with the constituted county officials on a county level. The same principle is true from the State to the County level as it is from the Federal level. From an administrative standpoint, it would probably be much easier for me as Director of Extension to have full authority to hire, fire, and pay workers on the county and local levels. It would probably save much argument and avoid some embarrassing situations. If I had that authority, however, I would inevitably become more or less autocratic and less appreciative of the other fellow's viewpoint and receive less cooperation from the individual producer, to serve whom the Extension Service was created.

In the Tennessee Valley we have at least two State agencies, each created for the purpose of serving agriculture and, at least, four Federal agencies working more or less in the same field. Each is now working more or less separately and, as I have attempted to point out, resulting in overlapping, confusion, jealousy, charges and countercharges, loss of efficiency in results and increased cost in public funds. Can any of us justifiably argue that this is a good system? I do not believe we can. On the other hand, I am firmly convinced that if the several agencies, Federal and State, would concentrate on trying to find a way and coordinate from the Federal to the State and from the State to the county and from the county

## PHOSPHATE SUPPLY

to the local level, we would speed up the adoption of better practices, increase efficiency of production, cut down decidedly in the use of public funds and, in the course of time, get almost united support on the part of the people for a better agriculture.

I fear that in most instances, when a question of cooperation and coordination arises, all of us approach the problem negatively by trying to find reasons legal or otherwise why it can't be done. Would it not be more constructive and objective to spend the time trying to find how it can be done?

There are many leading farmers, such as Mr. Picklesinner, giving serious thought to the situation and it is only a question of time until something is going to be done about it. We can largely correct the evils ourselves if we approach the problem objectively. If we don't, then I fear Congress will take the necessary action to get results.

✓ PROSPECTS FOR AN AMPLE SUPPLY OF PHOSPHATIC FERTILIZER  
IN THE TENNESSEE VALLEY 1/

by

Neil Bass

Chief Conservation Engineer, Tennessee Valley Authority,  
Knoxville, Tennessee

Mr. Chairman and member of the Conference:

I wish to review some figures with the hope that it will stimulate some discussion on the question of whether we can look forward to an ample supply of phosphate for the Tennessee Valley, and, if so, from what sources, and what character materials. The question itself creates other questions: The immediate one being how much is ample? How much phosphate should the Tennessee Valley region consume? We are seeking to find the answer to this question through our joint efforts to test fertilizers on the whole farm.

At the outset I'd like to describe briefly the functions of the TVA as a phosphate producer, and afterward, describe the plant we have at Muscle Shoals, and what we visualize the production capacity to be.

You recall that at the outset of TVA's research and development work on fertilizer processes, this group recommended that our first work should be toward the production of more economic and efficient phosphatic fertilizer. Nitrate Plant No. 2, where the research and process work is carried on, was built during World War I, under the Nation's defense Act of 1916, which provided that it would be used for the production of munitions in war and fertilizer in peace. You recall that between the

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1/ Statement made at the Twenty-Seventh Valley-States Conference, Abingdon, Virginia, Wednesday, April 2, 1947. See text, p. 26.



## NEIL BASS

close of World War I and the creation of TVA that the facilities remained idle. Now they are in use. The intent in the TVA Act is that these facilities, while being maintained in a condition of usefulness for war, should be currently used in a program of research on behalf of the public interest, for the improvement and cheapening of fertilizers.

It is clear that TVA is to carry the research work beyond the laboratory stage and develop and prove the new processes in actual plant scale operations. The wisdom of that is very well brought out by the fact that it is usual to have a lag of about seven years between the time that a new process is considered feasible and the time of getting it into operation. This lag involves considerable cost in solving problems in a new process. Our emphasis at Muscle Shoals therefore is not in the economic production of fertilizer as a producing plant. If TVA had set out to produce fertilizer as cheaply as it could be produced at the plant, we'd be guided by two things: Use proven processes, and operate the plant as cheaply as possible to produce tried and proven products. We wouldn't have selected Muscle Shoals as a site, but rather would have built a plant on top of the phosphate deposits. The job, rather, is to carry a new process through the laboratory stage and the pilot stage to get all the information we can there for the development of a commercial size process and then to build and perfect a plant to get a special product. We do not hesitate to tear out good facilities as we improve the process and product. And keep doing that.

I'd like to use the fused tricalcium process as an illustration.

Many of you have seen the fused tricalcium plant located at Godwin, near Columbia. You recall that the process itself is to heat the phosphate rock to a certain temperature in the presence of certain moisture and thereby drive off the fluorine making the  $P_2O_5$  in the phosphate rock available to growing plants. That knowledge was first developed by USDA in its laboratories fifteen years ago and was made generally available but the actual job of making a feasible process out of it was not accomplished.

TVA spent a great deal of time and effort in developing plant apparatus that would bring about that known chemical reaction. We finally arrived at a shaft-type furnace into which the phosphate rock is fed. The material is then fused and tapped from the base of the furnace as a molten mass where it is sprayed with water and granulated. We have been operating that plant now something like a year. Our costs for the product, due to this experimental operation, are about \$1.15 per unit of  $P_2O_5$ . That is the material you are using in the test-demonstration program.

I want to point out that we aren't worried about those costs because we know that with the perfection of the various steps in the process that a fused tricalcium phosphate can be produced in the neighborhood of 50 cents per unit. In other words we are constantly tearing out the equipment and changing it. In the end we can say here is a perfected process and a plant that will operate successfully and produce a low cost fertilizer.

Another process that you are more familiar with has been carried through those various steps and is now perfected: It is the art of making high analysis superphosphate with the electric furnaces. That is a stabilized

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plant; and other plants are being built in other parts of the country like it.

Another question that this subject provokes is how much phosphate is needed for the Tennessee Valley region. There have been many estimates as to the quantity that is needed and should be used. I think one of the early ones was made by the TVA on the basis of the experience of your recommendations for the applications of phosphate on test-demonstrations. Thus, back before 1940 we made a simple calculation like this: Out of 26 million acres of the watershed, 14 million acres were in forests, leaving 12 million acres of crop and pasture land, and for 20 pounds of  $P_2O_5$  per acre, it would require 120,000 tons  $P_2O_5$  per year. A little later, at the Birmingham meeting in 1944, this Valley States Conference made estimates of the  $P_2O_5$  in the Valley and arrived at the figure of 198,724 tons. The subsequent experience on the test-demonstration farms led you to recommend a higher figure, raising the estimate to 240,000 tons a year.

In estimating how much phosphate is required it seems that the quantity depends upon the point from which you start. You may know that our present rate of application in the Tennessee Valley watershed is about 78,000 tons of  $P_2O_5$ ; and from any of these estimates you could assume that from two to three times the amount of phosphate now being used should be used to carry out the test-demonstration farm experience.

I might give some other estimates from various authoritative sources. In 1943, the Committee of the Land Grant Colleges arrived at an estimate of 3,400,000 tons of  $P_2O_5$  that profitably could be used annually in the country as a whole; and this represented an increase of two and one-half times as much as was being used in the country at that time. The next year, the Committee reiterated their recommendation and again last December the same Committee recommended that the amount might be conservatively doubled, or 6,800,000 tons of  $P_2O_5$  might be used in the country, if we were to preserve our nation's soil fertility.

The National Resources Board also estimated losses from crops, etc., and arrived at the figure of approximately 6,000,000 tons of  $P_2O_5$ , that should be used annually to offset the depletion of our soils. We are now producing and using about 1,500,000 tons of  $P_2O_5$  annually in the country and use of adequate amounts would require an increase of more than four times the amount now being used.

I don't believe it has been released by the Department of Agriculture, but a study made by the PMA was presented to the Industrial Advisory Committee last month (the data were developed in cooperation with agencies in the States) which came to the conclusion, in answer to the question of how much phosphate farmers would buy over the next period of five years that the amount now being used should be increased 214 percent. The figure was 2,863,296 tons of  $P_2O_5$ . Another estimate of interest is by the Committee of the FAO which made a study of the fertilizer situation for the entire world. They arrived at an estimate of about 10,500,000 tons  $P_2O_5$  -- about two and one-half times the present world consumption. All of that sheds light only in terms of their relative relation to what we are using now.



Another question in this context is the adequacy of the Tennessee reserves to supply the long-time requirement of the Tennessee Valley. The Middle Tennessee reserves represent a little less than 2 percent of the total reserves of the country. The Florida reserves represent about 20 percent and the western reserves about 78 percent. In the Tennessee field this 2 percent (200 million tons of phosphatic raw materials) is broken down into three groups: Brown rock 92,350,000; blue rock 84,000; and white rock 23,000,000 tons. We are presently entirely dependent on the brown rock. TVA has done considerable exploratory mining of white rock but so far does not consider it a feasible source of raw material. This "white" rock has gone through the solution state and has been redeposited. The blue rock generally has considerable overburden and would call for tunnel mining. None of the phosphate producers has found it economical to operate on blue rock.

We are dependent, then, in the Tennessee field, on the less than 100 million tons of brown rock. The rate of withdrawal on this material is alarming. We are mining out 2,650,000 tons a year. That would give the reserves an estimated life of about forty years. Both Monsanto and Victor Chemical Companies have announced increases in the capacity of their middle Tennessee plants of about 50 percent. In terms of the national withdrawals, about 24 percent of all the rock comes out of this 2 percent; about 72 percent out of Florida; and only 4 percent out of the West. In terms of the national planning, we are on an unwise basis with respect to our phosphate reserves. That is why it is so important that a phosphate industry be developed in the West. The Bonneville Power Administration is working toward bringing a supply of electric power to that region, and we have been hoping that electric processes will be established in that region. It is also important to have the blast-furnace process perfected for use in that region too. We think that, when perfected, it can compete even where low-cost electricity prevails.

I'd like to talk about the TVA phosphate plant capacity at Muscle Shoals. You may recall that the electric-furnace process has been a known process since 1912, originating, I believe, in North Carolina. Later it was used to smelt rock for high-grade acids for industrial use. But the art of making high-strength phosphoric acid by the electric furnace process and using it for fertilizer manufacture had not been developed until it was developed at Muscle Shoals. We built back in 1934, '35, and '36 what was then considered the latest in electric furnaces. There were four of these electric furnaces, each having a 6,000 kwh capacity. Those furnaces were changed and improved year by year until now they have settled down into remarkable operations. When it became evident that more elemental phosphate would be needed as a part of the national defense program, we set about the construction of a fifth furnace at Muscle Shoals. It was double the size of the others. There is a long history about the anticipated shortage of phosphate during the war, during which TVA pointed out the need for the proposed Mobile plant. It turned out that TVA was right, and during the war, we were asked to build our No. 6 furnace, which we did, and have since placed it in operation. So we have now six electric furnaces. Two have 12,000 kwh, and the others 6,000 kwh capacity each. During the war, we tried to plan against the time when the war would end and we'd be asked to shift from phosphorus production to fertilizer production. We tried to anticipate facilities but WPB withheld permission to proceed with their

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construction. Since the war, however, one acid plant has been completed and another is now under construction. This second one will be completed about January 1948. When those two acid plants are completed our plant will be "balanced" as a fertilizer plant. The capacity of our plant at that time--which will be about January 1948--will be 133,300 tons of  $P_2O_5$  per year. Or, in terms of fertilizer product, including fused phosphate, metaphosphate, triple superphosphate, the capacity will be 301,400 tons.

We had recommended that the additional war capacity to produce phosphorus for munitions be located at Mobile to draw upon the Florida reserves. When finally the WPB also recognized the need for additional facilities, it was so urgently needed that the necessary time could not be taken to build the Mobile plant, and TVA was asked to add the new furnace to its Muscle Shoals plant. In agreeing, under protest, to build this sixth furnace at Muscle Shoals, our Board said at the time that it would be unsound to put in another facility this close to the Tennessee reserves with which to exhaust them that much more rapidly. As an operating policy, we are now bringing in about 30 percent of our phosphate rock requirements from Florida.

You may be interested in the ownership of the Tennessee reserves. Out of the 92 million tons of brown rock, the ownership is broken down approximately as follows: TVA owns 24 million tons; the commercial fertilizer producers own 50 million tons; and 18 million tons are in the hands of farmers. Our 24 million tons, should we supply our entire plant from it, would last something like 20 years, but we intend to get from Florida to the extent feasible.

I'd like to discuss briefly our distribution policy. For example, in fiscal year 1947, in which we are now operating, the test-demonstrations will require 22,600 tons of  $P_2O_5$ , leaving a balance of 60,000 tons for distribution as fertilizer this year. We are setting aside about 10,000 tons of that to be distributed in an experimental program under arrangements which will permit the gathering of data about what it will cost to get fertilizer on to the farm. This leaves about 50,000 tons during the current year which we are now distributing to cooperatives. In addition to the strictly Valley cooperatives, the southern group is represented by Associated Cooperatives, Inc., and the Middle West by the Central Farmers Fertilizer Company. It is recognized by many, I am sure, that there is need for more information--accurate information--as to what it costs to get fertilizer from the plant to the farm. Another unanswered question is how long it will take to gather sufficient information to be of use to farmers and to agricultural colleges in evaluating the economics of distribution and "direct" application. I'd like to leave this question: What would be the sound distribution policy of TVA for the use of any surplus production it has over and above the test-demonstration requirements.

I want to come back again to the basic statement that our job is to develop these new fertilizer processes and prove their economic feasibility in actual plant operations, and then to produce enough material for the testing of new products and for educational phases of the program--that is, so the farmers might get experience from these materials in the kind of farming practices that your institutions recommend. There is pending legislation, National Soils Fertility Bill, to extend the



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test-demonstration farm device on a national basis, and if that bill passes, an additional block of this tonnage will be absorbed in the extended test-demonstration work. In any event, it is clear that all our plant can produce will be severely needed, either for test-demonstrations or to help out during the period of needed phosphate supply.

TWENTY-SEVENTH VALLEY-STATES CONFERENCE  
 Martha Washington Inn, Abingdon, Virginia  
 Wednesday April 2, 1947

LIST OF VALLEY-STATES CONFERENCES

<u>No.</u>	<u>Date</u>	<u>Place</u>	<u>Proceedings</u>
1	1933, September 25	Knoxville, Tennessee	Typed, 2 pp.
2	1933, October 7	Knoxville, Tennessee	Typed, 1 p.
3	1934, July 6-7	Chattanooga, Tennessee	Typed, 5 pp.
4	1934, October 27	Muscle Shoals, Alabama	Mimeo., 13 pp.
5	1935, December 12	Chattanooga, Tennessee	Typed, 15 pp.
6	1936, June 26-27	Chattanooga, Tennessee	Mimeo., 20 pp.
7	1937, February 6	Knoxville, Tennessee	Typed, 5 pp.
8	1937, July 10	Knoxville, Tennessee	Typed, 10 pp.
9	1937, November 3	Knoxville, Tennessee	Typed, 5 pp.
10	1938, April 25	Knoxville, Tennessee	Typed 12 pp.
11	1938, October 4	Atlanta, Georgia	Typed, 10 pp.
12	1939, April 4	Birmingham, Alabama	Typed, 9 pp.
13	1939, October 3	Chattanooga, Tennessee	Typed, 9 pp.
14	1940, April 2	Knoxville, Tennessee	Mimeo., 17 pp.
15	1940, October 1	Asheville, North Carolina	Typed, 9 pp.
16	1941, March 4-5	Florence, Alabama	Mimeo., 32 pp.
17	1941, October 28	Atlanta, Georgia	Mimeo., 13 pp.
18	1942, March 3	Roanoke, Virginia	Mimeo., 13 pp.
19	1942, October 6	Knoxville, Tennessee	Mimeo., 44 pp.
20	1943, May 13	Atlanta, Georgia	Mimeo., 20 pp.
21	1944, April 3	Knoxville, Tennessee	Hecto., 61 pp.
22	1944, October 3	Birmingham, Alabama	Hecto., 74 pp.
23	1945, April 3	Atlanta, Georgia	Hecto., 68 pp.
24	1945, October 5	Chattanooga, Tennessee	Hecto., 88 pp.
25	1946, April 3	Atlanta, Georgia	Mimeo., 77 pp.
26	1946, October 2	Biloxi, Mississippi	Mimeo., 93 pp.
27	1947, April 2	Abingdon, Virginia	Mimeo., 86 pp.





